

UNITED STATES NAVAL OBSERVATORY
CIRCULAR NO. 37

U. S. Naval Observatory, Washington 25, D. C.

December 1, 1952

SOLAR SUMMARY FOR 1950

The solar circulars which give the daily results of sunspot measures made at the U. S. Naval Observatory have been printed with the aid of punched cards since January 1950. These cards have also been used to compile the Summary for 1950.

Table I gives the mean values of A , g , s , and r for each month, and for the year.

Table II gives the same quantities for each day.

Table IIIa summarizes for each day the results for each group which was numbered at Mount Wilson. The first line contains the group number. The other lines list, for the entire group, in the successive columns:

1. Date of observation: the month, day, and decimal of a day in U. T.
2. The mean heliographic longitude, L .
3. The mean heliographic latitude, φ .
4. The total area, A .
5. The total spot count, s .
6. The number of parts, p , which were listed separately in the monthly circulars.

The quantities L and φ are the unweighted means of the several parts. Hence, the appearance or disappearance of a small spot may affect the day-to-day values of L and φ . Similarly, there may be apparent changes in these quantities when the group is near the limb and the measures are uncertain.

An entry for December at the beginning of the Table IIIa refers to the year 1949 and an entry for January at the end refers to 1951.

Table IIIb gives similar data for the unnumbered groups, that is, those marked by an asterisk in the monthly circulars. These groups generally consisted of a small spot which appeared on one day.

Table IV lists groups which may be recurrent. The data are derived from the Mount Wilson results given in the *Publications of the Astronomical Society of the Pacific*, which should be consulted for details on the recurrences.

In compiling this summary a number of discrepancies in the monthly circulars were found. The corrected results are given here, and the errata to the monthly circulars will be given in the Summary for 1951.

TABLE I

	<i>A</i>	<i>g</i>	<i>s</i>	<i>r</i>
JANUARY	1560	7.6	46	122
FEBRUARY	2173	6.5	36	101
MARCH	1839	8.2	36	118
APRIL	2460	6.6	54	120
MAY	1667	7.0	42	112
JUNE	1178	5.4	33	87
JULY	1371	5.9	48	107
AUGUST	1230	6.3	36	99
SEPTEMBER	580	4.1	27	68
OCTOBER	674	4.9	31	80
NOVEMBER	900	4.4	29	73
DECEMBER	762	3.8	30	68
MEAN	1366	5.9	37	96

TABLE II

Date	<i>A</i>	<i>g</i>	<i>s</i>	<i>r</i>	Date	<i>A</i>	<i>g</i>	<i>s</i>	<i>r</i>
JANUARY					6	2010	13	56	186
1	2024	6	80	140	7	3138	12	37	157
2	1454	4	50	90	8	2908	12	68	188
3	1513	6	28	88	9	3125	10	61	161
4	1682	6	30	90	10	3211	9	46	136
5	1212	7	18	88	11	3064	9	81	171
6	803	7	38	108	12	2715	7	31	101
7	822	7	42	112	13	2676	8	27	107
8	738	6	15	75	14	2890	9	36	126
9	641	4	17	57	15	3040	9	26	116
10	507	6	44	104	16	2701	7	42	112
11	640	5	31	81	17	2404	7	37	107
13	944	5	65	115	18	1902	5	23	73
15	1133	8	18	98	19	1502	7	25	95
16	596	9	27	117	20	1174	9	20	110
17	1101	8	22	102	21	1029	6	21	81
18	1611	7	21	91	22	677	5	31	81
19	1865	10	97	197	23	581	4	25	65
20	2873	9	63	153	24	591	7	24	94
21	2683	8	71	151	25	836	8	48	128
22	3259	9	111	201	26	1023	7	42	112
23	3466	11	41	151	27	1169	5	9	59
24	2774	12	84	204	28	1167	9	48	138
25	3306	12	122	242	29	2169	9	19	109
26	2276	12	62	182	30	1756	7	14	84
27	1429	9	35	125	31	1478	6	19	79
28	1496	8	47	127					
29	1235	6	33	93					
30	773	7	30	100					
31	375	5	7	57					
FEBRUARY					APRIL				
1	356	7	21	91	1	1397	6	69	129
2	58	4	10	50	2	1636	7	53	123
3	169	3	9	39	3	2155	11	46	156
4	241	3	4	34	4	2434	10	92	192
5	229	3	6	36	5	2664	9	47	137
7	338	2	4	24	6	2373	7	23	93
8	302	2	8	28	7	2785	8	40	120
9	326	3	6	36	8	2703	7	31	101
11	1041	4	13	53	9	2909	6	27	87
12	1442	4	26	66	10	2618	4	23	63
13	2484	7	37	107	11	1987	6	24	84
14	4362	9	41	131	12	2108	4	29	69
15	5187	8	85	165	13	2466	4	43	83
16	5284	8	131	211	14	2980	5	54	104
17	4869	8	62	142	15	2725	6	46	106
18	4714	9	58	148	16	2423	5	87	137
19	4435	11	92	202	17	2618	3	43	73
20	4192	10	53	153	18	2606	4	27	67
21	4141	10	40	140	19	2519	5	35	85
22	3573	10	72	172	20	1536	5	55	105
23	3005	8	35	115	21	1839	4	68	108
24	2386	7	42	112	22	1527	3	24	54
25	1611	7	39	109	23	2033	7	60	130
26	665	7	14	84	24	2652	7	51	121
27	471	7	14	84	25	2916	10	149	249
28	622	8	22	102	26	2599	7	67	137
					27	3427	8	68	148
					28	3381	9	60	150
					29	3004	10	68	168
					30	2784	10	109	209
MARCH					MAY				
1	962	9	23	113	1	2653	10	62	162
2	896	6	14	74	3	1184	9	62	152
3	1248	9	25	115	4	1441	8	35	115
4	1522	12	66	186					
5	1433	11	75	185					

TABLE II

Date	<i>A</i>	<i>g</i>	<i>s</i>	<i>r</i>	Date	<i>A</i>	<i>g</i>	<i>s</i>	<i>r</i>
5	1587	7	40	110	3	629	4	20	60
6	1987	8	52	132	4	449	5	23	73
7	2144	8	47	127	5	533	3	11	41
8	2472	8	34	114	7	1453	6	23	83
9	1295	8	30	110	8	1430	4	24	64
10	1078	5	23	73	10	1684	5	49	99
11	1156	6	31	91	11	1523	5	50	100
12	1033	4	50	90	12	932	3	30	60
13	702	4	13	53	13	811	5	61	111
14	715	4	17	57	14	536	5	79	129
15	582	3	11	41	15	853	6	72	132
16	720	5	17	67	16	944	6	29	89
17	1295	7	39	109	17	1187	5	56	106
18	1688	8	61	141	18	1641	6	21	81
19	1721	8	40	120	19	2066	6	38	98
20	1992	8	29	109	20	2228	6	55	115
21	2206	6	30	89	21	2197	7	57	127
22	1998	9	60	150	22	2169	7	70	140
23	2094	9	57	147	23	1879	7	94	164
24	2665	10	40	140	24	1816	8	34	114
25	2641	9	142	232	25	1938	8	50	130
26	2525	8	62	142	26	1299	9	107	197
27	2604	8	45	125	27	1459	10	57	157
28	2035	6	19	79	28	1350	9	40	130
29	1645	7	45	115	29	1926	9	42	132
30	981	5	37	87	30	2155	5	52	102
31	1163	4	24	64	31	1363	3	30	60
JUNE					AUGUST				
1	617	7	55	125	1	1280	6	37	97
2	775	6	53	113	2	1433	7	56	126
3	739	5	49	99	3	1465	6	43	103
4	761	5	52	102	4	1727	4	45	85
5	636	6	18	78	5	1570	4	32	72
6	690	4	9	49	6	1454	5	59	109
7	436	6	22	82	7	1157	5	26	76
8	902	6	25	85	8	1139	5	22	72
9	1975	4	35	75	9	1173	6	27	87
10	1884	6	23	83	10	1114	6	27	87
11	1658	8	44	124	11	829	5	33	83
12	1605	4	51	91	12	1272	6	50	110
13	1900	5	59	109	13	1059	5	30	80
14	1839	5	39	89	14	834	6	38	98
15	1555	5	68	118	15	1581	7	36	106
16	1877	4	15	55	16	1452	7	48	118
17	1440	4	11	51	17	1441	6	54	114
18	1527	4	11	51	18	1714	7	46	116
19	1479	4	9	49	19	1576	8	38	118
20	1247	5	11	61	20	1417	8	23	103
21	557	4	7	47	21	1344	7	37	107
22	835	7	18	88	22	1368	7	26	96
23	1174	8	51	131	23	1356	8	33	113
24	1138	8	36	116	24	1380	8	63	143
25	1192	8	51	131	25	1611	6	25	85
26	1259	7	73	143	26	1484	6	29	89
27	1181	5	32	82	27	761	7	21	91
28	569	3	25	55	28	290	7	28	98
29	836	4	17	57	29	697	7	25	95
30	993	5	27	77	30	696	7	22	92
					31	459	6	37	97
JULY					SEPTEMBER				
1	628	6	42	102	1	533	4	34	74
2	679	4	62	102					

TABLE II

Date	A	g	s	r	Date	A	g	s	r
2	427	3	26	56	NOVEMBER				
3	448	7	19	89	1	664	5	53	103
4	282	4	21	61	2	640	4	40	80
5	169	3	4	34	3	616	4	23	63
6	242	2	2	22	4	1150	6	45	105
7	314	2	4	24	5	1161	7	28	98
8	345	3	8	38	6	1224	6	29	89
9	269	5	38	88	7	1198	5	36	86
10	121	1	10	20	8	1211	6	85	145
11	350	3	12	42	9	1320	4	40	80
12	435	3	45	75	10	1624	4	16	56
13	982	4	77	117	11	1659	6	36	96
14	1241	6	28	88	12	1143	6	30	90
15	974	5	32	82	13	957	4	12	52
16	1026	6	46	106	14	1089	5	32	82
17	933	5	19	69	15	1059	7	29	99
18	1077	6	30	90	16	1048	4	48	88
19	1005	6	33	93	17	968	4	23	63
20	990	5	42	92	18	883	4	21	61
21	705	5	16	66	20	677	3	47	77
22	718	6	44	104	21	230	2	12	32
23	532	4	22	62	22	181	2	4	24
24	435	3	25	55	23	218	2	6	26
25	484	3	26	56	24	157	1	3	13
26	509	3	28	58	25	133	2	16	36
27	490	4	39	79	26	376	3	11	41
28	266	4	51	91	27	1018	5	33	83
29	593	4	10	50	28	1078	5	38	88
30	520	4	10	50	29	1271	5	32	82
					30	1138	6	23	83
OCTOBER					DECEMBER				
1	436	3	6	36	1	1309	7	41	111
2	497	3	10	40	2	1283	7	36	106
3	618	3	27	57	3	1537	8	44	124
4	604	4	25	65	4	1178	7	33	103
5	557	4	20	60	5	899	7	29	99
6	473	3	11	41	6	969	5	19	69
7	440	5	30	80	7	1845	7	55	125
8	1575	8	65	145	8	2047	7	38	108
9	1345	11	45	157	9	2008	7	75	145
10	874	9	48	138	10	1557	7	149	219
11	756	9	34	124	11	1725	6	92	152
12	780	9	47	137	12	1550	5	49	99
13	604	7	20	90	13	1223	4	59	99
15	648	6	59	119	14	1090	4	19	59
16	981	8	49	129	15	164	3	14	44
17	1078	6	52	112	16	119	3	6	36
18	1005	5	47	97	17	72	3	3	33
19	703	2	23	43	18	48	1	1	11
20	533	3	29	59	19	24	1	1	11
21	88	2	22	42	20	36	2	2	12
22	108	1	13	23	21	12	1	2	12
23	207	1	28	38	22	6	1	3	13
24	242	2	26	46	23	16	1	5	15
25	400	2	19	39	24	138	3	17	47
26	606	3	12	42	25	277	3	44	74
27	467	4	18	58	26	605	2	10	30
28	806	5	19	69	27	698	3	23	53
29	980	8	51	131	28	436	1	23	33
30	1065	7	51	121	29	315	1	15	25
31	652	5	30	80	30	303	1	9	19
					31	146	1	2	12

TABLE IIIa

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
10175	12 22,769	268	+12	170	7	2		1 8,681	184	+6	97	1	1
	12 23,647	268	+12	508	31	4							
	12 24,652	268	+10	557	8	3	10186	1 1,766	253	+12	12	2	1
	12 25,700	270	+11	946	9	3							
	12 26,726	270	+11	726	19	3	10187	1 3,720	91	-12	121	1	1
	12 27,728	270	+11	690	13	4		1 4,663	92	-12	121	1	1
	12 28,652	271	+11	678	9	2		1 5,707	92	-12	97	1	1
	12 29,736	271	+12	509	26	2		1 6,643	90	-12	60	2	2
	12 30,681	270	+12	509	6	2		1 7,694	91	-13	12	1	1
	12 31,665	268	+12	509	2	2							
	1 1,766	268	+13	448	4	2							
10177	12 24,652	225	+22	218	1	1	10188	1 3,720	181	+12	12	2	1
	12 25,700	226	+23	267	1	1		1 4,663	182	+13	96	4	2
	12 26,726	226	+23	242	1	1		1 5,707	181	+11	48	2	1
	12 27,728	225	+23	218	1	1		1 6,643	181	+11	16	1	1
	12 28,652	225	+24	218	1	1							
	12 29,736	224	+24	207	1	1	10189	1 5,707	76	+9	170	4	1
	12 30,681	225	+23	170	1	1		1 6,643	77	+9	242	13	1
	12 31,665	224	+22	170	1	1		1 7,694	77	+8	242	21	2
	1 1,766	225	+23	194	1	1		1 8,681	78	+7	242	4	2
	1 2,694	225	+24	194	1	1		1 9,729	78	+9	96	7	2
	1 3,720	226	+24	145	1	1		1 10,644	80	+9	48	8	2
	1 4,663	226	+24	145	1	1		1 11,662	83	+9	48	5	1
10180	12 26,726	209	+23	24	3	1		1 13,747	84	+9	109	19	2
	12 27,728	210	+22	73	6	1		1 15,676	84	+10	170	2	2
	12 28,652	209	+23	121	4	2	10190	1 5,707	129	+20	24	3	1
	12 29,736	210	+22	109	40	1							
	12 30,681	215	+23	157	9	2	10191	1 6,643	88	+13	146	16	2
	12 31,665	208	+22	437	44	4		1 7,694	87	+13	315	12	2
	1 1,766	209	+23	946	56	3		1 8,681	89	+13	315	4	2
	1 2,694	210	+22	933	36	5		1 9,729	88	+13	412	3	2
	1 3,720	212	+22	933	14	4		1 10,644	90	+14	254	8	2
	1 4,663	212	+23	872	13	3		1 11,662	90	+14	218	12	2
	1 5,707	212	+22	703	6	3		1 13,747	92	+13	170	2	1
	1 6,643	210	+22	145	1	1		1 15,676	92	+13	242	1	1
10181	12 27,728	178	+4	191	1	1	10192	1 7,694	45	-4	48	1	1
	12 28,652	178	+3	194	1	1		1 8,681	44	-4	48	1	1
	12 29,736	176	+4	206	6	2		1 9,729	44	-4	36	2	1
	12 30,681	179	+4	194	1	1		1 10,644	46	-4	12	1	1
	12 31,665	179	+4	170	1	1		1 11,662	46	-4	24	1	1
	1 1,766	179	+5	109	3	1	10193	1 7,694	147	+19	48	4	1
	1 2,694	179	+5	109	3	1							
	1 3,720	180	+5	109	2	1	10194	1 9,729	101	+12	97	5	2
	1 4,663	180	+5	242	3	1		1 10,644	104	+12	145	14	3
	1 5,707	179	+5	97	1	1		1 11,662	104	+13	290	11	3
	1 6,643	180	+4	73	3	1		1 13,747	105	+12	533	14	2
	1 7,694	180	+5	12	2	1	10195	1 10,644	35	+8	36	9	2
	1 8,681	179	+5	12	1	1		1 11,662	36	+8	60	2	2
10185	12 30,680	177	+7	24	1	1		1 13,747	37	+6	96	11	3
	12 31,665	178	+6	121	14	1		1 15,676	38	+7	158	9	2
	1 1,766	180	+6	315	14	3		1 16,665	38	+6	48	9	1
	1 2,694	180	+6	218	10	3							
	1 3,720	182	+7	193	8	2							
	1 4,663	180	+7	206	8	3							
	1 5,707	183	+7	73	1	1							
	1 6,643	184	+5	121	2	1							
	1 7,694	185	+6	145	1	1							

TABLE IIIa

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
10196	1 13,747	352	-12	36	19	2							
							1 22,723	316	+15	824	17	2	
							1 23,638	317	+17	533	3	2	
							1 24,689	315	+17	533	2	2	
							1 25,656	319	+17	339	2	1	
10197	1 15,676	14	+14	36	1	1							
	1 16,665	14	+14	24	3	1							
	1 17,785	13	+14	48	2	1							
	1 18,668	15	+14	146	2	2							
	1 19,887	15	+14	218	13	2							
	1 20,658	14	+16	291	6	2							
10198	1 15,676	351	-13	36	1	1							
							10206	1 17,785	272	+10	485	1	1
								1 18,668	273	+11	436	1	1
								1 19,887	273	+10	291	1	1
								1 20,658	273	+10	436	1	1
								1 21,662	273	+14	345	2	2
								1 22,723	271	+12	303	9	2
								1 23,638	271	+12	339	5	2
								1 24,689	272	+10	218	2	1
								1 25,656	272	+10	145	2	1
								1 26,658	272	+11	145	2	1
								1 27,781	272	+11	24	3	1
10199	1 15,676	335	+17	6	2	1							
	1 16,665	336	+17	72	4	2							
	1 17,785	336	+15	96	7	2							
	1 18,668	338	+16	194	7	2							
	1 19,887	339	+16	170	20	3							
	1 20,658	340	+17	388	9	1							
	1 21,662	343	+17	364	8	2							
	1 22,723	343	+17	339	6	2							
	1 23,638	348	+17	194	2	1							
							10208	1 19,887	247	+ 9	351	5	3
								1 20,658	247	+10	630	2	2
								1 21,662	249	+10	363	5	3
								1 22,723	246	+10	363	31	3
								1 23,638	249	+11	558	12	3
								1 24,689	247	+11	376	20	3
								1 25,656	247	+12	472	29	3
								1 26,658	247	+11	254	9	3
								1 27,781	250	+10	266	5	2
								1 28,700	253	+10	248	3	2
								1 29,792	253	+10	242	4	1
10200	1 15,676	308	- 8	388	1	1							
	1 16,665	308	- 8	291	1	1							
	1 17,785	307	- 7	291	1	1							
	1 18,668	309	- 8	388	1	1							
	1 19,887	306	-10	315	13	2							
	1 20,658	306	- 9	340	9	2							
	1 21,662	308	- 8	242	1	1							
	1 22,723	309	- 9	267	1	1							
	1 23,638	308	- 8	291	1	1							
	1 24,689	308	- 8	267	1	1							
	1 25,656	308	- 8	267	1	1							
	1 26,658	308	- 9	242	1	1							
							10209	1 19,887	295	-12	48	10	1
								1 20,658	296	-11	97	10	1
								1 21,662	296	-12	194	27	2
								1 22,723	297	-12	315	33	2
								1 23,638	297	-12	387	9	2
								1 24,689	297	-12	231	16	2
								1 25,656	295	-11	291	7	1
								1 26,658	297	-12	97	3	2
10201	1 15,676	296	+ 6	97	1	1							
	1 16,665	298	+ 7	73	2	1							
	1 17,785	299	+ 7	36	1	1							
	1 18,668	300	+ 7	36	1	1							
	1 19,887	299	+ 7	24	1	1							
							10210	1 20,658	251	+ 4	73	4	1
								1 21,662	252	+ 5	73	6	1
								1 22,723	252	+ 4	73	6	1
								1 23,638	254	+ 5	61	2	1
								1 24,689	256	+ 5	12	1	1
								1 26,658	258	+ 4	24	3	1
								1 27,781	260	+ 4	12	1	1
10202	1 16,665	294	+21	16	1	1							
	1 17,785	292	+20	12	1	1							
	1 18,668	293	+20	48	1	1							
	1 19,887	292	+20	12	1	1							
	1 20,658	291	+20	12	3	1							
							10211	1 21,662	215	+21	436	5	1
								1 22,723	217	+21	581	5	2
								1 23,638	218	+20	824	3	3
								1 24,689	217	+21	751	11	3
								1 25,656	219	+20	691	19	3
								1 26,658	217	+20	533	7	2
								1 27,781	216	+20	570	9	3
								1 28,700	219	+20	630	11	1
								1 29,792	219	+20	582	8	1
								1 30,667	220	+22	448	7	2
								1 31,656	221	+21	170	30	2
								2 1,743	222	+22	218	3	2
							10212	1 22,723	205	+ 9	194	3	2
10203	1 16,665	10	- 1	12	2	1							
10204	1 16,665	321	-12	12	1	1							
10205	1 16,665	309	+15	48	4	2							
	1 17,785	310	+15	121	8	2							
	1 18,668	313	+16	363	8	2							
	1 19,887	314	+15	412	28	2							
	1 20,658	315	+16	606	19	2							
	1 21,662	315	+17	666	17	3							

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p	
		°	°						°	°				
	1 23,638	206	+10	170	2	2		2 4,663	104	+12	24	1	1	
	1 24,689	206	+10	72	7	2		2 5,674	104	+12	48	1	1	
	1 25,656	207	+ 8	108	16	3		2 7,873	99	+14	96	3	2	
	1 26,658	208	+ 9	97	10	2		2 8,653	100	+15	60	7	2	
	1 27,781	210	+ 9	170	5	2		2 9,760	101	+14	72	4	2	
	1 28,700	211	+11	194	14	3								
	1 29,792	211	+10	121	9	2		10224	2 1,743	201	+22	12	3	1
	1 30,667	215	+10	72	7	2								
	1 31,656	218	+ 9	48	1	1		10225	2 3,656	145	- 8	24	3	1
	2 1,743	216	+ 9	36	1	1								
10214	1 24,689	301	+17	48	5	1		10226	2 3,656	42	+13	121	5	1
	1 25,656	302	+17	339	8	2		2 4,663	43	+14	169	2	2	
	1 26,658	301	+17	533	5	2		2 5,674	44	+14	145	4	2	
10215	1 23,638	290	+20	61	1	1		10227	2 7,873	346	+18	242	1	1
	1 24,689	291	+20	12	3	1		2 8,653	346	+18	242	1	1	
	1 25,656	291	+21	145	7	1		2 9,760	347	+18	242	1	1	
10216	1 23,638	191	+16	48	1	1		2 11,649	347	+18	194	1	1	
	1 24,689	189	+15	170	4	2		2 12,630	347	+18	218	1	1	
	1 25,656	190	+13	255	10	2		2 13,690	348	+18	206	1	1	
	1 26,658	189	+12	193	8	2		2 14,728	347	+18	194	1	1	
	1 27,781	192	+11	194	1	1		2 15,698	347	+19	194	1	1	
	1 28,700	189	+13	206	4	2		2 16,681	348	+18	194	1	1	
	1 29,792	192	+12	218	6	2		2 17,831	347	+19	194	1	1	
	1 30,667	194	+12	145	7	2		2 18,690	349	+19	194	1	1	
	1 31,656	193	+12	73	1	1		2 19,738	349	+19	121	1	1	
	2 1,743	193	+14	36	7	2								
10217	1 24,689	185	+ 4	84	12	3		10228	2 9,760	4	+17	12	1	1
	1 25,656	185	+ 3	193	15	4								
	1 26,658	183	+ 2	85	7	3		10229	2 11,649	341	-19	435	10	3
	1 27,781	184	+ 2	48	3	2		2 12,630	341	-19	727	23	3	
	1 28,700	186	+ 2	60	7	2		2 13,690	344	-17	751	25	3	
10218	1 25,656	229	-12	61	6	1		2 14,728	341	-18	921	15	3	
	1 26,658	229	-13	61	4	1		2 15,698	345	-16	957	35	4	
	1 27,781	231	-12	109	6	2		2 16,681	343	-17	897	54	3	
	1 28,700	233	-12	61	3	1		2 17,831	342	-16	872	16	3	
	1 29,792	230	-12	48	5	2		2 18,690	343	-16	678	9	2	
10220	1 27,781	171	-16	36	2	2		2 19,738	344	-16	582	7	2	
	1 28,700	168	-17	24	1	1								
10222	1 30,667	114	-17	48	3	1		10230	2 11,649	308	-10	194	1	1
	1 31,656	114	-18	48	1	1		2 12,630	309	-10	194	1	1	
	2 1,743	112	-17	24	4	1		2 13,690	310	- 9	194	1	1	
	2 2,744	113	-17	24	3	1		2 14,728	309	- 9	194	1	1	
	2 4,663	116	-18	48	1	1		2 15,698	310	- 9	194	1	1	
	2 5,674	117	-18	36	1	1		2 16,681	311	- 9	194	1	1	
10223	1 30,667	102	+15	24	1	1		2 17,831	309	- 8	145	1	1	
	1 31,656	103	+17	36	1	1		2 18,690	311	- 8	170	1	1	
	2 1,743	102	+14	24	2	1		2 19,738	310	- 9	145	1	1	
	2 2,744	103	+12	16	2	1		2 20,640	310	- 7	194	1	1	
	2 3,656	103	+12	24	1	1		2 21,668	310	- 7	145	1	1	
								2 22,722	310	- 7	121	1	1	
								10231	2 11,649	302	+14	218	1	1
								2 12,630	303	+14	303	1	1	
								2 13,690	303	+14	291	1	1	
								2 14,728	303	+15	291	1	1	
								2 15,698	305	+15	327	5	2	

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
	2 16,681	307	+15	339	11	2		2 21,668	217	+16	145	1	1
	2 17,831	307	+15	436	6	2		2 22,722	217	+17	121	1	1
	2 18,690	303	+18	388	6	2		2 23,636	218	+17	109	1	1
	2 19,738	304	+16	339	1	1		2 24,697	217	+17	97	1	1
	2 20,640	306	+16	315	1	1		2 25,633	218	+17	73	1	1
	2 21,668	299	+16	363	4	2		2 26,667	218	+17	48	1	1
	2 22,722	305	+16	291	1	1							
10232	2 13,690	55	+11	72	5	2	10238	2 18,690	243	- 8	24	2	1
	2 14,728	53	+11	96	2	2							
10233	2 13,690	265	+13	776	3	2	10239	2 19,738	283	+ 3	73	3	1
	2 14,728	264	+12	2036	9	6		2 20,640	286	+ 4	72	2	2
	2 15,698	262	+10	2594	28	6		2 21,668	285	+ 4	24	1	1
	2 16,681	262	+10	2860	47	6	10240	2 19,738	196	+ 5	170	21	1
	2 17,831	262	+10	2762	30	7		2 20,640	198	+ 4	121	2	1
	2 18,690	262	+10	2666	30	6		2 21,668	197	+ 4	121	1	1
	2 19,738	262	+12	2375	50	7		2 22,722	197	+ 5	97	1	1
	2 20,640	264	+12	2448	38	7		2 23,636	198	+ 5	242	1	1
	2 21,668	265	+10	2338	18	7		2 24,697	197	+ 4	121	1	1
	2 22,722	267	+10	1854	37	7		2 25,633	196	+ 4	121	3	2
	2 23,636	269	+11	1575	20	5		2 26,667	199	+ 4	97	1	1
	2 24,697	269	+12	1357	13	4		2 27,624	199	+ 4	97	1	1
	2 25,633	268	+11	751	6	3		2 28,766	200	+ 4	73	1	1
								3 1,632	199	+ 5	109	1	1
10234	2 13,690	266	+ 4	194	1	1		3 2,633	200	+ 5	109	1	1
	2 14,728	267	+ 3	194	1	1	10241	2 19,738	183	+10	194	1	1
	2 15,698	270	+ 2	194	1	1		2 20,640	182	+ 9	533	2	2
	2 16,681	271	+ 2	170	1	1		2 21,668	179	+ 9	545	4	3
	2 17,831	270	+ 3	169	5	2		2 22,722	180	+10	484	2	2
	2 18,690	270	+ 2	230	7	2		2 23,636	182	+ 9	412	2	2
	2 19,738	270	+ 3	194	5	2		2 24,697	180	+ 9	327	6	3
	2 20,640	272	+ 2	194	1	1		2 25,633	183	+10	230	11	2
	2 21,668	272	+ 2	170	1	1		2 26,667	187	+ 9	218	1	1
	2 22,722	271	+ 2	145	1	1		2 27,624	188	+10	242	1	1
	2 23,636	273	+ 2	170	1	1		2 28,766	189	+10	242	1	1
	2 24,697	273	+ 3	145	1	1		3 1,632	188	+10	291	1	1
	2 25,633	273	+ 3	145	1	1		3 2,633	188	+10	291	1	1
								3 3,637	188	+10	291	1	1
10235	2 14,728	265	+25	145	1	1	10242	2 20,640	204	+15	73	4	1
	2 15,698	266	+24	242	7	2		2 21,668	204	+12	121	7	2
	2 16,681	266	+24	218	9	2		2 22,722	203	+13	97	10	2
	2 17,831	270	+23	194	2	1		2 23,636	205	+13	109	5	2
	2 18,690	268	+23	194	1	1		2 24,697	205	+13	145	18	1
	2 19,738	267	+23	145	1	1		2 25,633	204	+13	194	16	2
	2 20,640	269	+23	145	1	1		2 26,667	203	+14	157	8	2
	2 21,668	267	+24	169	2	2		2 28,766	207	+14	18	2	2
	2 22,722	267	+23	121	1	1	10243	2 22,722	292	+12	242	17	2
	2 23,636	268	+23	194	1	1		2 23,636	292	+13	194	4	1
	2 24,697	267	+23	194	2	1							
	2 25,633	269	+23	97	1	1	10244	2 26,667	110	+20	97	1	1
10236	2 14,728	24	-19	291	10	2		2 27,624	113	+20	24	5	1
	2 15,698	23	-18	485	7	2		2 28,766	111	+20	24	3	1
	2 16,681	24	-18	412	7	3	10245	2 26,667	180	- 9	36	1	1
10237	2 17,831	208	+18	97	1	1		2 27,624	182	-11	36	2	1
	2 18,690	216	+17	170	1	1							
	2 19,738	215	+17	97	1	1							
	2 20,640	218	+17	97	1	1							

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
	2 28.766	181	-11	24	2	1		3 8.832	113	+28	145	1	1
	3 1.632	181	-9	24	1	1		3 9.633	116	+28	145	1	1
10246	2 26.667	150	-15	12	1	1	10253	3 3.637	75	+7	73	2	1
	2 27.624	152	-13	36	2	1		3 4.656	78	+7	96	12	3
								3 5.678	77	+7	72	6	2
								3 6.634	76	+6	121	7	1
10247	2 27.624	177	-16	24	1	1	10254	3 3.637	53	+9	48	3	1
	2 28.766	178	-16	24	4	1		3 4.656	55	+9	48	3	1
	3 4.656	183	-14	48	1	1		3 5.678	55	+9	24	5	1
10248	2 27.624	139	-7	12	2	1	10255	3 3.637	33	+15	48	1	1
	2 28.766	136	-6	72	8	2		3 4.656	43	+14	96	3	2
	3 1.632	137	-7	60	7	2		3 5.678	42	+11	12	1	1
	3 2.633	137	-8	84	9	2	10256	3 4.656	26	-19	73	1	1
	3 3.637	136	-6	73	2	1		3 5.678	22	-19	103	4	2
	3 4.656	135	-6	73	2	1		3 6.634	22	-19	85	3	2
	3 5.678	138	-6	109	3	2		3 7.694	25	-19	48	1	1
	3 6.634	141	-7	24	3	1	10257	3 4.656	28	-30	96	3	2
10249	2 28.766	80	-20	145	1	1		3 5.678	28	-29	60	2	2
	3 1.632	74	-23	193	3	2		3 6.634	28	-28	36	2	2
	3 2.633	78	-23	194	1	1		3 7.694	31	-26	60	2	2
	3 3.637	80	-23	206	4	2		3 8.832	29	-25	24	2	1
	3 4.656	79	-21	157	7	2		3 9.633	25	-21	48	2	1
	3 5.678	78	-22	133	11	2	10258	3 5.678	14	+17	12	1	1
	3 6.634	77	-22	121	2	2		3 6.634	13	+16	6	1	1
	3 7.694	78	-21	97	1	1	10259	3 6.634	94	-15	6	1	1
	3 8.832	77	-21	48	1	1	10260	3 6.634	52	+10	48	2	1
	3 9.633	79	-21	36	1	1		3 7.694	51	+10	48	4	1
								3 8.832	53	+11	12	2	1
10250	3 1.632	72	-4	61	4	1	10261	3 6.634	1	+21	157	4	2
	3 2.633	73	-4	24	1	1		3 7.694	359	+21	388	2	2
	3 3.637	75	-4	170	5	1		3 8.832	0	+21	339	13	2
	3 4.656	76	-3	351	22	3		3 9.633	0	+21	606	15	2
	3 5.678	78	-3	448	25	3		3 10.664	0	+21	703	10	2
	3 6.634	79	-4	533	28	2		3 11.706	1	+21	630	16	2
	3 7.694	79	-5	606	11	2		3 12.651	1	+21	473	6	3
	3 8.832	79	-5	558	13	2		3 13.778	0	+22	581	8	4
	3 9.633	80	-5	509	11	2		3 14.629	0	+22	582	10	1
	3 10.664	79	-5	412	3	2		3 15.660	358	+23	642	5	2
	3 11.706	83	-5	388	1	1		3 16.657	3	+23	630	4	2
								3 17.667	3	+22	533	1	1
10251	3 1.632	59	+5	194	1	1	10262	3 6.634	348	-18	485	1	1
	3 2.633	58	+4	194	1	1		3 7.694	343	-20	1067	2	2
	3 3.637	59	+4	194	1	1		3 8.832	341	-19	1164	7	3
	3 4.656	58	+4	230	4	2		3 9.633	343	-19	1163	4	3
	3 5.678	59	+4	206	9	2		3 10.664	341	-19	1175	5	3
	3 6.634	60	+5	194	1	1							
	3 7.694	60	+5	145	1	1							
	3 8.832	61	+5	97	1	1							
	3 9.633	62	+4	97	1	1							
	3 10.664	61	+4	73	1	1							
	3 11.706	61	+4	24	6	1							
10252	3 3.637	112	+24	145	6	3							
	3 4.656	112	+27	242	6	2							
	3 5.678	114	+27	254	8	3							
	3 6.634	113	+27	194	1	1							
	3 7.694	113	+27	242	1	1							

TABLE IIIa

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
	3 11,706	343	-18	1078	23	5		3 14,629	276	+13	630	1	1
	3 12,651	343	-17	921	11	4		3 15,660	277	+13	691	2	2
	3 13,778	341	-18	921	11	3		3 16,657	275	+12	606	8	2
	3 14,629	344	-16	946	10	3		3 17,667	274	+13	533	8	2
	3 15,660	341	-17	1066	9	3		3 18,631	275	+12	436	7	3
	3 16,657	344	-16	969	14	3		3 19,730	275	+12	533	5	3
	3 17,667	340	-16	867	6	4		3 20,631	277	+12	436	4	3
	3 18,631	342	-15	933	3	3		3 21,640	277	+13	315	7	2
	3 19,730	341	-17	339	6	1		3 22,738	276	+13	242	7	2
								3 23,653	278	+12	218	6	2
10263	3 7,694	349	+11	73	3	1							
	3 8,832	350	+11	48	1	1	10272	3 13,778	259	+20	145	1	1
	3 9,633	354	+11	61	6	1		3 14,629	261	+20	339	3	1
	3 10,664	355	+11	61	1	1		3 15,660	261	+20	303	1	1
	3 11,706	354	+11	97	5	1		3 16,657	257	+21	254	4	2
	3 12,651	355	+11	121	3	1		3 17,667	260	+20	242	2	1
	3 13,778	354	+11	48	1	1		3 18,631	258	+21	242	3	3
	3 14,629	355	+12	36	1	1		3 19,730	261	+20	194	1	1
	3 15,660	355	+11	36	1	1		3 20,631	262	+20	194	1	1
	3 16,657	356	+12	12	4	1		3 21,640	262	+21	194	1	1
								3 22,738	261	+22	157	2	2
10264	3 7,694	128	+10	194	3	1		3 23,653	263	+21	145	1	1
	3 8,832	128	+10	97	1	1		3 24,674	262	+21	194	1	1
								3 25,626	263	+21	194	1	1
10265	3 7,694	56	+29	170	6	2	10273	3 15,660	28	-25	24	1	1
	3 8,832	58	+29	315	20	3							
	3 9,633	59	+29	424	18	3	10274	3 14,629	2	-18	73	2	1
	3 10,664	57	+30	509	21	3		3 15,660	2	-18	24	1	1
	3 11,706	59	+30	509	25	3							
	3 12,651	60	+29	485	6	3	10275	3 14,629	308	-15	6	4	1
	3 13,778	52	+29	194	1	1							
10266	3 8,832	70	+23	61	6	1	10276	3 16,657	264	+11	12	1	1
	3 9,633	71	+23	36	2	1		3 17,667	265	+11	24	5	1
	3 10,664	69	+23	36	3	1							
10267	3 10,664	310	-10	48	1	1	10277	3 17,667	288	+14	84	8	2
	3 11,706	309	-9	48	1	1		3 18,631	288	+14	158	7	2
	3 12,651	311	-9	36	1	1		3 19,730	290	+14	194	7	2
	3 13,778	310	-9	36	1	1		3 20,631	291	+13	145	4	2
	3 14,629	313	-9	24	2	1		3 21,640	291	+16	60	4	2
	3 15,660	312	-9	24	1	1		3 22,738	286	+15	12	1	1
10268	3 10,664	300	+11	194	1	1	10278	3 19,730	281	+17	36	3	2
	3 11,706	295	+13	266	3	3		3 20,631	281	+16	84	4	2
	3 12,651	296	+13	291	3	3		3 21,640	284	+18	72	4	2
	3 13,778	295	+13	266	3	3							
	3 14,629	297	+13	254	3	3	10279	3 19,730	190	+9	145	1	1
	3 15,660	298	+13	230	5	3		3 20,631	190	+9	194	1	1
	3 16,657	297	+14	218	7	3		3 21,640	189	+9	170	1	1
	3 17,667	299	+14	121	7	2		3 22,738	189	+9	145	1	1
	3 18,631	297	+15	133	3	3		3 23,653	190	+9	145	1	1
	3 19,730	298	+14	61	2	1		3 24,674	189	+9	145	1	1
10269	3 11,706	22	-20	24	1	1		3 25,626	191	+9	145	1	1
								3 26,677	190	+9	145	1	1
10271	3 12,651	274	+13	388	1	1		3 27,668	190	+10	97	1	1
	3 13,778	273	+13	485	1	1		3 28,646	191	+9	85	1	1
								3 29,788	190	+10	145	1	1
								3 30,665	191	+10	121	1	1

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
10280	3 20.631	308	- 8	12	3	1		4 3,701	84	- 2	194	1	1
								4 4,667	84	- 3	200	2	2
								4 5,850	83	- 3	255	2	2
10281	3 20.631	221	-10	12	1	1		4 6,876	84	- 3	218	1	1
								4 7,642	83	- 3	194	1	1
10282	3 20.631	181	-18	97	2	1							
	3 21.640	181	-18	218	4	1	10289	3 28.646	133	+10	16	7	1
	3 22.738	179	-18	121	20	1		3 29.788	133	+ 9	12	1	1
	3 23.653	181	-18	73	17	1							
	3 24.674	180	-20	72	11	2	10290	3 28.646	57	+11	97	1	1
	3 25.626	184	-18	48	6	1		3 29.788	60	+12	194	4	2
	3 26.677	182	-17	36	8	1		3 30.665	60	+12	267	2	2
	3 28.646	181	-18	12	6	1		3 31.636	62	+12	279	2	2
10283	3 24.674	146	-13	48	3	1		4 1.665	58	+ 9	363	47	6
	3 25.626	148	-13	24	1	1		4 2.674	59	+11	400	13	4
	3 26.677	147	-13	6	1	1		4 3,701	57	+ 9	376	12	3
	3 28.646	147	-13	12	6	1		4 4,667	59	+11	473	37	5
10284	3 24.674	253	- 8	24	3	1		4 5,850	60	+11	460	17	4
	3 25.626	252	- 8	24	4	1		4 6,876	62	+11	315	4	2
								4 7,642	63	+11	266	4	2
								4 8,722	60	+10	218	3	1
								4 9,670	60	+11	145	3	1
10285	3 24.674	203	- 2	48	2	1							
	3 25.626	206	- 3	170	23	2	10292	3 29.788	57	+30	630	1	1
	3 26.677	205	- 3	339	18	2		3 30.665	57	+29	630	1	1
	3 27.668	208	- 2	448	3	3		3 31.636	58	+29	630	1	1
	3 28.646	206	- 3	363	9	3		4 1.665	57	+29	582	1	1
	3 29.788	206	- 3	291	2	2		4 2.674	54	+30	606	4	2
10286	3 24.674	156	+22	60	3	2		4 3,701	55	+29	582	1	1
	3 25.626	158	+22	134	11	2		4 4,667	55	+29	582	1	1
	3 26.677	158	+22	158	12	2		4 5,850	55	+28	582	1	1
	3 27.668	159	+22	121	2	2		4 6,876	54	+28	533	1	1
	3 28.646	159	+23	97	15	2		4 7,642	54	+27	582	1	1
	3 29.788	159	+23	97	3	3		4 8,722	53	+27	582	1	1
	3 30.665	153	+23	36	2	1		4 9,670	54	+27	582	1	1
	3 31.636	154	+24	24	2	1		4 10,710	56	+27	388	1	1
10287	3 25.626	103	+29	97	1	1							
	3 26.677	103	+28	145	1	1	10293	3 29.788	56	- 4	339	4	2
	3 27.668	102	+29	212	2	2		3 30.665	57	- 6	314	5	4
	3 28.646	104	+28	194	1	1		3 31.636	60	- 5	182	11	4
	3 29.788	102	+29	170	1	1		4 1.665	64	- 5	61	4	1
	3 30.665	103	+28	170	1	1		4 2.674	63	- 4	109	10	3
	3 31.636	104	+28	145	1	1		4 3,701	64	- 5	72	6	3
	4 1.665	103	+29	121	4	2		4 4,667	64	- 5	48	8	2
	4 2.674	102	+27	97	1	1		4 5,850	66	- 5	48	2	1
	4 3,701	101	+27	97	1	1		4 6,876	66	- 5	96	4	2
	4 4,667	98	+30	157	3	2		4 7,642	66	- 5	96	8	2
	4 5,850	98	+27	145	1	1		4 8,722	67	- 4	97	1	1
10288	3 26.677	81	- 2	194	1	1							
	3 27.668	82	- 3	291	1	1	10294	4 1.665	62	-22	16	5	1
	3 28.646	83	- 2	291	2	1		4 2.674	64	-22	158	9	2
	3 29.788	83	- 2	291	2	1		4 3,701	63	-22	387	14	2
	3 30.665	83	- 2	218	2	1		4 4,667	63	-22	484	22	2
	3 31.636	85	- 2	218	2	1		4 5,850	65	-22	654	13	4
	4 1.665	82	- 3	254	8	2		4 6,876	65	-21	678	7	2
	4 2,674	83	- 3	242	6	2		4 7,642	67	-21	630	11	2
								4 8,722	67	-21	558	5	2
								4 9,670	64	-21	97	2	1
							10295	4 3,701	43	-21	12	4	1

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
10296	4 2,674	22	+12	24	10	1	10308	4 13,647	214	+14	436	6	2
	4 3,701	22	+11	60	2	2		4 14,644	214	+14	848	7	2
	4 4,667	22	+11	109	7	2		4 15,865	216	+14	969	12	2
	4 5,850	23	+12	169	9	3		4 16,668	217	+14	776	16	2
	4 6,876	25	+14	242	5	2		4 17,683	216	+14	727	17	2
	4 7,642	26	+14	193	7	2		4 18,723	216	+14	582	8	2
	4 8,722	29	+14	73	2	1		4 19,636	216	+15	484	12	2
	4 9,670	30	+13	73	1	1		4 20,595	217	+15	436	11	2
	4 10,710	31	+13	97	1	1		4 21,668	213	+13	375	24	3
	4 11,778	31	+13	48	1	1		4 22,631	215	+16	364	6	2
								4 23,603	215	+15	206	15	2
10297	4 3,701	353	+ 9	24	1	1		4 24,792	212	+15	242	6	1
	4 4,667	354	+ 8	24	6	1		4 25,598	212	+15	145	13	1
	4 5,850	355	+ 7	12	1	1							
10298	4 3,701	343	-18	339	1	1	10309	4 14,644	206	- 3	97	2	1
	4 4,667	343	-21	351	4	2		4 15,865	203	- 3	60	2	2
	4 5,850	343	-17	339	1	1		4 16,668	207	- 3	48	1	1
	4 6,876	343	-17	291	1	1		4 18,723	208	- 3	12	2	1
	4 7,642	343	-19	339	3	2		4 20,595	205	- 3	12	2	1
	4 8,722	343	-18	303	2	2	10310	4 16,668	303	+ 9	36	3	1
	4 9,670	342	-18	315	7	2							
	4 10,710	344	-18	339	6	2	10311	4 19,636	195	+ 9	12	4	1
	4 11,778	344	-18	230	2	2							
	4 12,761	343	-18	218	5	2	10312	4 19,636	135	-15	12	2	1
	4 13,647	344	-17	145	1	1		4 20,595	132	-16	218	18	2
	4 14,644	343	-16	121	1	1		4 21,668	132	-17	460	16	3
	4 15,865	343	-17	73	1	1		4 22,631	132	-17	945	15	3
10299	4 4,667	38	+12	6	2	1		4 23,603	132	-18	1163	20	3
10303	4 7,642	292	+14	485	5	2		4 24,792	132	-17	1066	22	3
	4 8,722	292	+13	872	17	2		4 25,598	132	-17	969	64	3
	4 9,670	292	+12	1697	13	3		4 26,631	133	-17	727	27	3
	4 10,710	291	+13	1794	15	2		4 27,688	131	-17	824	16	3
	4 11,778	291	+15	1673	16	4		4 28,640	132	-18	630	15	3
	4 12,761	290	+14	1769	12	7		4 29,685	134	-19	534	12	2
	4 13,647	293	+13	1770	28	6		4 30,590	134	-19	460	6	2
	4 14,644	293	+13	1721	31	6		5 1,663	134	-17	364	4	2
	4 15,865	294	+12	1394	19	8	10313	4 20,595	138	+14	22	6	2
	4 16,668	293	+15	1248	40	5							
	4 17,683	293	+15	1333	14	4	10314	4 21,668	107	-12	60	11	2
	4 18,723	293	+15	1261	7	3		4 22,631	108	-12	218	3	3
	4 19,636	295	+14	1212	6	3		4 23,603	107	-12	435	15	3
10305	4 12,761	256	+ 7	97	8	2		4 24,792	109	-12	824	14	3
	4 13,647	257	+ 7	115	8	2		4 25,598	110	-12	1030	40	3
	4 14,644	258	+ 7	193	13	3		4 26,631	111	-12	1114	26	3
	4 15,865	261	+ 7	217	11	3		4 27,688	110	-12	1405	22	3
	4 16,668	262	+ 8	315	27	2		4 28,640	110	-11	1310	23	4
	4 17,683	262	+ 8	558	12	3		4 29,685	111	-13	1163	23	3
	4 18,723	262	+ 7	751	10	5		4 30,590	112	-13	1114	28	3
	4 19,636	262	+ 7	799	11	4		5 1,663	112	-11	872	21	3
	4 20,595	263	+ 7	848	18	5	10315	4 23,603	200	+ 9	24	2	1
	4 21,668	261	+ 9	944	17	4		4 24,792	202	+ 8	97	1	1
10306	4 11,778	27	+29	12	1	1		4 25,598	202	+ 9	36	7	2
10307	4 11,778	18	-16	12	3	1	10316	4 23,603	198	- 7	12	3	1
	4 12,761	19	-16	24	4	1	10317	4 23,603	138	+25	48	4	1

TABLE IIIa

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p	
		°	°						°	°				
10318	4 23,603	84	- 2	145	1	1	10325	5 4,743	30	+15	545	10	2	
	4 24,792	86	- 2	145	1	1		5 5,692	31	+15	885	16	4	
	4 25,598	86	- 2	145	1	1		5 6,726	32	+12	969	13	5	
	4 26,631	86	- 2	170	1	1		5 7,644	33	+14	994	11	3	
	4 27,688	85	- 2	145	1	1		5 8,636	35	+15	970	7	3	
	4 28,640	86	- 2	145	1	1		10326	4 28,640	15	+12	194	1	1
	4 29,685	86	- 2	145	1	1			4 29,685	10	+13	145	2	2
	4 30,590	86	- 2	145	1	1			4 30,590	11	+13	157	4	2
	5 1,663	88	- 1	145	1	1			5 1,663	11	+12	133	2	2
	5 3,969	86	- 3	109	2	1			5 3,969	16	+12	145	1	1
	5 4,743	88	- 2	145	1	1			5 4,743	17	+12	97	1	1
10319	4 24,792	123	- 5	36	6	2	5 5,692		17	+12	97	1	1	
	4 25,598	123	- 5	12	4	1	5 6,726		17	+12	97	1	1	
10320	4 25,598	89	-15	16	1	1	5 7,644		17	+14	36	1	1	
	4 26,631	89	-15	24	1	1	5 8,636		18	+13	36	1	1	
	4 27,688	89	-15	24	4	1	10327		4 29,685	58	-12	24	3	1
	4 28,640	90	-15	24	1	1		4 30,590	59	-11	60	9	2	
	4 29,685	89	-14	24	4	1		5 1,663	60	-11	97	5	1	
	4 30,590	93	-16	36	9	2		5 3,969	62	-12	72	13	2	
10321	4 24,792	69	-20	242	1	1		5 4,743	64	-12	97	5	1	
	4 25,598	69	-21	291	9	1		5 5,692	66	-12	73	7	1	
	4 26,631	70	-20	224	3	2	10328	5 1,663	344	+16	73	10	1	
	4 27,688	69	-21	266	12	2		5 3,969	344	+16	242	21	2	
	4 28,640	69	-20	230	2	2		5 4,743	345	+17	291	10	3	
	4 29,685	70	-21	206	2	2		5 5,692	345	+17	363	8	3	
	4 30,590	69	-21	194	1	1		5 6,726	345	+17	243	31	3	
	5 1,663	67	-21	218	2	1		5 7,644	347	+17	206	13	3	
	5 3,969	65	-22	145	1	1		5 8,636	346	+18	194	6	3	
	5 4,743	66	-22	145	3	1		5 9,643	344	+19	36	2	1	
	5 5,692	70	-21	97	1	1	10329	5 3,969	310	+ 8	12	1	1	
	5 6,726	67	-22	97	2	1		5 4,743	313	+ 8	97	4	1	
10322	4 25,598	75	-11	30	9	2		5 5,692	313	+ 7	48	3	1	
	4 26,631	76	-11	73	8	2		5 6,726	315	+ 7	48	1	1	
	4 27,688	74	-11	85	7	2	5 7,644	316	+ 7	24	2	1		
	4 28,640	75	-10	121	7	2	5 8,636	315	+ 9	24	2	2		
	4 29,685	74	-11	145	8	2	5 9,643	313	+ 9	24	1	1		
	4 30,590	79	-10	85	3	2	10330	5 5,692	291	+ 6	24	4	1	
5 1,663	79	-10	73	5	1	5 6,726		290	+ 7	24	1	1		
10323	4 25,598	47	+25	242	1	1		5 7,644	290	+ 7	12	2	1	
	4 26,631	48	+26	267	1	1		5 9,643	284	+ 8	12	4	1	
	4 27,688	48	+26	339	1	1	10331	5 6,726	27	-14	24	1	1	
	4 28,640	49	+26	291	1	1		5 7,644	29	-12	97	8	1	
	4 29,685	49	+26	267	2	1		5 8,636	27	-14	339	7	3	
	4 30,590	48	+26	242	3	1		5 9,643	26	-13	291	5	2	
5 1,663	48	+27	194	2	1	10332	5 6,726	270	+ 6	485	2	1		
5 3,969	48	+27	48	4	1		5 7,644	271	+ 6	678	7	2		
5 4,743	49	+27	24	1	1		5 8,636	271	+ 5	800	4	2		
10324	4 27,688	23	+16	339	5		2	5 9,643	269	+ 7	727	5	2	
	4 28,640	26	+16	436	9	3	10332	5 6,726	270	+ 6	485	2	1	
	4 29,685	25	+15	351	11	3		5 7,644	271	+ 6	678	7	2	
	4 30,590	27	+15	291	45	3		5 8,636	271	+ 5	800	4	2	
	5 1,663	29	+14	484	10	3		5 9,643	269	+ 7	727	5	2	
	5 3,969	31	+13	387	18	3								

TABLE III a

No.	Date	<i>L</i>	φ	<i>A</i>	<i>s</i>	<i>p</i>	No.	Date	<i>L</i>	φ	<i>A</i>	<i>s</i>	<i>p</i>
		°	°						°	°			
	5 10,681	271	+ 7	642	5	2		5 18,660	142	-17	157	18	3
	5 11,637	271	+ 9	715	21	4		5 19,743	142	-17	73	2	2
	5 12,588	270	+ 8	703	36	3		5 20,672	147	-17	73	1	1
	5 13,717	270	+ 8	436	7	3		5 21,740	146	-18	73	2	1
	5 14,686	270	+ 8	437	6	3		5 22,640	148	-18	48	1	1
	5 15,730	272	+ 7	376	6	2		5 23,664	149	-18	48	1	1
	5 16,699	272	+ 8	363	5	2		5 24,640	149	-17	48	1	1
	5 17,647	273	+ 6	267	1	1		5 25,577	149	-17	24	1	1
	5 18,660	273	+ 6	242	1	1		5 26,653	149	-17	12	1	1
10333	5 7,644	50	+ 2	97	3	1	10345	5 16,699	135	-15	48	3	1
10334	5 8,636	340	-19	97	6	1		5 17,647	133	-16	193	3	2
	5 9,643	340	-19	145	8	1		5 18,660	132	-16	387	19	3
	5 10,681	340	-19	73	7	1		5 19,743	133	-17	315	8	2
	5 11,637	341	-19	48	2	1		5 20,672	138	-16	248	10	3
	5 12,588	340	-19	48	8	1		5 21,740	138	-13	206	13	2
10335	5 8,636	349	-12	12	1	1		5 22,640	140	-14	109	7	2
	5 12,588	347	-15	16	2	1		5 23,664	138	-15	109	9	2
10336	5 9,643	301	+15	12	2	1		5 24,640	141	-14	61	1	1
10337	5 9,643	311	-12	48	3	1		5 25,577	141	-15	48	6	1
	5 10,681	312	-11	48	6	1		5 26,653	137	-17	60	5	2
	5 11,637	312	-11	36	3	1		5 27,647	133	-18	12	3	1
10338	5 10,681	215	+10	291	4	2	10346	5 17,647	231	- 8	36	6	1
	5 11,637	216	+11	339	3	2		5 18,660	232	- 8	84	15	2
	5 12,588	217	+11	266	4	3		5 19,743	232	- 7	194	10	2
	5 13,717	217	+10	206	2	2		5 20,672	235	- 6	24	1	1
	5 14,686	218	+ 9	218	6	2	10347	5 17,647	115	-11	291	1	1
	5 15,730	219	+ 9	194	1	1		5 18,660	115	-11	582	1	1
	5 16,699	217	+10	200	2	2		5 19,743	116	-11	485	2	1
	5 17,647	220	+ 9	194	1	1		5 20,672	118	-11	485	2	1
	5 18,660	220	+ 9	194	1	1		5 21,740	116	-11	388	3	1
	5 19,743	220	+11	194	1	1		5 22,640	116	-10	388	6	2
	5 20,672	221	+10	194	1	1		5 23,664	115	-10	339	3	2
	5 21,740	223	+12	206	2	2		5 24,640	118	-10	291	5	2
	5 22,640	221	+10	194	1	1		5 25,577	118	-10	255	6	2
10339	5 10,681	296	- 3	24	1	1		5 26,653	117	-10	242	2	2
	5 11,637	297	- 4	12	1	1		5 27,647	118	-11	194	1	1
10340	5 13,717	303	+10	48	2	2		5 28,689	117	-11	194	1	1
10342	5 13,717	225	+15	12	2	1		5 29,565	119	-11	170	1	1
	5 14,686	224	+15	48	4	1	10348	5 18,660	156	-15	18	4	2
10343	5 15,730	279	- 5	12	4	1		5 19,743	157	-15	170	14	2
	5 16,699	277	- 3	24	1	1		5 20,672	157	-15	145	7	2
	5 17,647	278	- 4	48	7	1		5 21,740	159	-15	170	3	2
	5 18,660	277	- 4	24	2	1		5 22,640	159	-16	48	11	2
10344	5 16,699	142	-18	85	6	2		5 23,664	158	-16	24	7	2
	5 17,647	141	-18	266	20	2		5 24,640	159	-15	12	2	2
							10349	5 19,743	242	+16	96	2	2
								5 20,672	243	+15	97	2	1
							10350	5 19,743	87	+ 8	194	1	1
								5 20,672	85	+ 9	726	5	5
								5 21,740	85	+ 8	1163	7	5
								5 22,640	85	+ 9	1127	26	5
								5 23,664	87	+ 9	1090	19	5
								5 24,640	86	+10	994	17	4
								5 25,577	88	+ 9	969	69	5
								5 26,653	89	+ 9	975	39	4

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
	5 27.647	87	+ 9	993	28	4	6 2.655	5	+ 5	485	26	2	
	5 28.689	88	+ 8	836	11	5	6 3.561	4	+ 4	509	21	3	
	5 29.565	89	+ 9	824	21	4	6 4.780	5	+ 5	593	26	4	
	5 30.569	89	+10	751	13	3	6 5.684	5	+ 4	570	9	3	
	5 31.692	95	+ 9	679	1	1	6 6.647	4	+ 5	557	4	3	
							6 7.651	7	+ 6	170	2	2	
10351	5 22.640	132	+19	48	5	1	10360	5 29.565	51	-12	72	5	2
	5 23.664	133	+19	267	8	1	5 30.569	51	-11	12	1	1	
	5 24.640	133	+20	969	7	2							
	5 25.577	134	+17	922	32	3	10361	5 31.692	351	+17	36	3	1
	5 26.653	132	+18	861	8	3	6 1.708	351	+17	12	7	1	
	5 27.647	133	+18	969	2	2							
	5 28.689	133	+19	727	3	2	10362	6 1.708	21	+17	12	4	1
	5 29.565	133	+19	436	1	1	6 2.655	23	+16	61	4	1	
10352	5 22.640	112	+16	24	1	1							
	5 23.664	114	+16	48	2	1	10363	6 1.708	9	+15	84	6	2
10354	5 22.640	143	+21	12	2	1	6 2.655	10	+16	36	11	2	
	5 23.664	144	+21	24	7	1	6 3.561	12	+15	12	3	1	
	5 24.640	142	+20	12	2	1	6 4.780	13	+15	12	1	1	
10355	5 23.664	43	+12	145	1	1	10364	6 1.708	302	+ 9	12	2	1
	5 24.640	46	+12	145	1	1	6 2.655	303	+ 9	72	8	2	
	5 25.577	46	+12	61	1	1	6 3.561	303	+ 9	48	14	2	
	5 26.653	45	+12	48	1	1	6 4.780	303	+ 9	72	8	2	
	5 27.647	45	+12	61	1	1	6 5.684	302	+ 9	12	1	1	
	5 28.689	47	+13	60	2	2							
	5 29.565	47	+12	22	4	2	10365	6 2.655	273	+ 5	109	1	1
	5 30.569	49	+13	12	4	1	6 3.561	274	+ 5	73	8	1	
	6 1.708	48	+10	12	1	1	6 4.780	274	+ 4	48	7	1	
	6 2.655	51	+ 9	12	3	1	6 5.684	274	+ 4	24	4	1	
	6 3.561	51	+ 9	97	3	1	6 6.647	274	+ 4	48	2	1	
							6 7.651	274	+ 4	133	6	2	
10356	5 24.640	40	+32	97	2	1	6 8.681	275	+ 3	30	4	2	
	5 25.577	42	+32	314	12	3	6 9.647	277	+ 4	60	6	2	
	5 26.653	40	+30	218	2	2	6 10.799	277	+ 4	73	4	1	
	5 27.647	37	+31	194	1	1	6 11.769	276	+ 5	12	1	1	
	5 28.689	36	+30	121	1	1							
	5 29.565	37	+31	97	8	2	10366	6 4.780	306	+18	36	10	2
	5 30.569	37	+31	97	1	1	6 5.684	310	+18	12	1	1	
	5 31.692	34	+31	73	2	1							
	6 1.708	33	+31	24	2	1	10367	6 6.647	268	+10	24	2	1
							6 8.681	268	+ 9	24	5	1	
10357	5 24.640	130	+27	36	2	1	6 10.799	268	+ 7	12	1	1	
	5 25.577	134	+24	36	12	2							
	5 26.653	132	+24	109	4	2	10368	6 6.647	248	+13	61	1	1
	5 27.647	130	+24	175	8	3	6 7.651	248	+13	61	4	1	
	5 28.689	131	+23	97	1	1							
10358	5 25.577	37	-15	12	3	1	10369	6 7.651	333	+20	36	4	1
10359	5 27.647	0	+ 7	6	1	1	10370	6 7.651	310	-10	12	2	1
	5 29.565	3	+ 6	24	5	1	6 8.681	309	-11	18	2	2	
	5 30.569	2	+ 6	109	18	2	6 9.647	311	-11	97	11	1	
	5 31.692	2	+ 5	375	18	3	6 10.799	310	-10	121	5	1	
	6 1.708	3	+ 5	461	33	2							

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
10371	6 7.651	304	+10	24	4	1	10382	6 16,672	93	+ 9	436	1	1
								6 17,670	93	+ 8	388	1	1
10372	6 8.681	309	+17	145	10	1		6 18,675	92	+ 8	339	1	1
	6 9.647	310	+18	121	9	2		6 19,676	93	+ 8	424	3	3
	6 10.799	311	+18	194	2	1		6 20,646	94	+ 8	363	7	2
	6 11.769	310	+19	194	2	1		6 21,822	92	+ 8	315	1	1
								6 22,695	89	+10	363	2	2
10373	6 8.681	192	-18	679	3	2		6 23,716	92	+ 8	291	1	1
	6 9.647	189	-19	1697	9	4		6 24,656	90	+10	315	5	2
	6 10.799	187	-19	1448	9	8		6 25,649	91	+ 8	339	2	1
	6 11.769	185	-21	1308	26	8		6 26,650	91	+ 8	339	2	1
	6 12,659	185	-19	1472	40	7		6 27,646	92	+ 9	291	1	1
	6 13,649	185	-20	1199	26	6	10383	6 20,646	28	+14	73	1	1
	6 14,648	187	-19	1283	21	6		6 21,822	27	+13	97	1	1
	6 15,569	188	-19	1187	36	6		6 22,695	24	+13	145	2	2
	6 16,672	191	-20	1102	9	6		6 23,716	24	+14	230	5	3
	6 17,670	196	-19	876	5	4		6 24,656	25	+14	121	3	2
	6 18,675	189	-19	909	2	2		6 25,649	26	+14	97	3	1
	6 19,676	195	-19	873	1	1		6 26,650	27	+13	36	5	1
	6 20,646	197	-19	727	1	1		6 27,646	28	+13	12	1	1
								6 28,653	29	+15	12	1	1
10374	6 10.799	305	+ 9	36	2	1	10384	6 21,822	48	+ 9	121	4	3
	6 11.769	306	+ 9	48	1	1		6 22,695	49	+ 9	243	9	2
10375	6 12.659	227	+10	12	6	1		6 23,716	50	+10	473	21	3
								6 24,656	51	+ 9	533	14	2
10377	6 11.769	240	+14	12	1	1		6 25,649	52	+ 9	581	24	2
	6 12,659	242	+14	24	2	1		6 26,650	53	+ 8	642	35	3
	6 13,649	244	+13	97	18	1		6 27,646	53	+10	690	17	3
	6 14,648	244	+13	97	5	1		6 28,653	54	+10	472	19	3
	6 15,569	248	+12	72	15	3		6 29,647	53	+10	497	4	2
								6 30,650	58	+ 9	485	2	1
10378	6 13,649	281	+19	48	6	1	10385	6 22,695	133	-13	36	1	1
10379	6 12,659	136	-19	97	3	3		6 23,716	132	-14	84	2	2
	6 13,649	138	-19	387	7	4	10386	6 22,695	15	+10	12	1	1
	6 14,648	139	-19	290	8	3		6 23,716	17	+ 7	36	8	2
	6 15,569	140	-18	169	13	3		6 24,656	15	+10	97	7	1
	6 16,672	139	-19	218	3	3		6 25,649	13	+12	72	3	2
	6 17,670	140	-19	91	3	3		6 26,650	14	+11	36	3	2
	6 18,675	141	-19	182	5	3		6 27,646	19	+11	6	1	1
	6 19,676	145	-18	121	4	3	10387	6 22,695	17	+ 4	12	2	1
	6 20,646	145	-18	48	1	1		6 24,656	20	+ 4	12	1	1
								6 25,649	20	+ 4	12	2	1
10380	6 13,649	126	+17	169	2	2	10388	6 23,716	31	-14	24	8	1
	6 14,648	127	+17	157	4	2		6 24,656	34	-14	24	3	1
	6 15,569	127	+17	121	3	2		6 25,649	33	-14	73	15	1
	6 16,672	127	+17	121	2	2		6 26,650	32	-16	194	21	2
	6 17,670	126	+17	85	2	2		6 27,646	34	-16	182	12	2
	6 18,675	132	+17	97	3	3		6 28,653	35	-15	85	5	2
	6 19,676	120	+16	61	1	1		6 29,647	34	-15	73	2	2
	6 20,646	121	+16	36	1	1		6 30,650	38	-14	24	1	1
	6 21,822	120	+16	24	1	1		7 1,699	37	-13	24	1	1
	6 22,695	119	+17	24	1	1							
	6 23,716	122	+18	24	2	1							
10381	6 14,648	205	+ 6	12	1	1							
	6 15,569	207	+ 6	6	1	1							

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
10389	6 23,716	0	+ 4	12	4	1	10402	7 7,668	313	-12	12	1	1
	6 24,656	0	+ 4	12	1	1							
	6 25,649	0	+ 4	12	1	1	10403	7 7,668	310	+19	266	6	2
10390	6 26,650	86	-15	6	1	1		7 8,647	310	+19	485	5	2
10391	6 24,656	18	+21	24	2	1	10405	7 10,716	238	+ 5	146	15	3
	6 25,649	17	+21	6	1	1		7 11,650	239	+ 7	193	20	2
								7 12,560	239	+ 7	194	7	4
								7 13,674	241	+ 6	169	5	3
10393	6 29,647	9	-17	121	10	1	10406	7 10,716	134	+20	642	18	3
	6 30,650	10	-17	181	20	3		7 11,650	133	+20	660	21	4
	7 1,699	10	-18	157	13	2		7 12,560	133	+20	520	22	5
	7 2,572	13	-18	142	27	3		7 13,674	132	+20	388	42	2
	7 3,640	16	-20	48	6	1		7 14,588	134	+20	230	60	3
10395	6 29,647	277	+20	145	1	1		7 15,564	131	+21	242	42	4
	6 30,650	279	+20	194	1	1		7 16,788	135	+19	121	11	2
	7 1,699	278	+20	194	1	1		7 17,649	136	+19	109	13	2
	7 2,572	279	+20	194	1	1		7 18,716	136	+20	73	1	1
	7 3,640	277	+20	194	1	1		7 19,649	135	+18	133	13	3
	7 4,690	276	+20	194	1	1		7 20,658	134	+18	72	5	3
	7 5,670	277	+20	194	1	1	10407	7 13,674	173	+33	12	5	1
	7 7,668	277	+21	145	1	1		7 14,588	173	+34	16	4	1
	7 8,647	276	+20	145	1	1							
	7 10,716	277	+20	109	1	1	10408	7 13,674	129	-15	48	8	2
10397	6 30,650	275	-28	109	3	2		7 14,588	129	-13	84	13	2
	7 1,699	276	-28	96	3	2		7 15,564	129	-13	60	22	2
	7 2,572	278	-26	52	9	2		7 16,788	130	-13	109	4	2
	7 3,640	281	-26	48	4	1		7 17,649	130	-13	121	15	2
	7 4,690	276	-27	12	2	1		7 18,716	132	-12	48	2	1
10398	7 1,699	9	-13	145	19	1	10409	7 14,588	90	+ 9	12	1	1
	7 2,572	12	-14	291	25	2		7 15,564	91	+ 9	6	1	1
	7 3,640	12	-15	339	9	2							
	7 4,690	7	-13	97	1	1	10411	7 15,564	57	+ 8	339	1	1
10399	7 4,690	270	+14	134	16	2		7 16,788	57	+ 9	339	1	1
	7 5,670	272	+14	218	9	2		7 17,649	56	+ 9	400	5	2
	7 7,668	274	+13	497	11	4		7 18,716	57	+10	394	4	2
	7 8,647	276	+13	606	17	3		7 19,649	58	+ 8	388	1	1
	7 10,716	276	+12	557	8	3		7 20,658	56	+ 9	363	11	2
	7 11,650	272	+14	436	4	3		7 21,826	59	+ 8	452	13	3
10400	7 5,670	189	-21	121	1	1		7 22,649	58	+ 7	303	5	2
	7 7,668	190	-20	242	1	1		7 23,569	59	+ 8	266	8	3
	7 8,647	191	-20	194	1	1		7 24,754	56	+ 8	242	1	1
	7 10,716	189	-20	230	7	2		7 25,647	57	+ 6	242	1	1
	7 11,650	192	-19	218	1	1		7 26,566	58	+ 7	218	1	1
	7 12,560	194	-19	218	1	1		7 27,651	58	+ 6	218	1	1
	7 13,674	193	-19	194	1	1	10412	7 16,788	79	+12	169	10	3
	7 14,588	194	-19	194	1	1		7 17,649	80	+12	363	22	2
	7 15,564	193	-19	194	1	1		7 18,716	80	+12	484	12	2
	7 16,788	193	-19	194	1	1		7 19,649	82	+10	636	17	3
	7 17,649	194	-19	194	1	1		7 20,658	81	+12	727	36	2
10401	7 7,668	326	+ 8	291	3	2		7 21,826	81	+11	776	21	2
								7 22,649	80	+11	582	27	2
								7 23,569	82	+11	522	24	3
								7 24,754	81	+11	533	7	2
								7 25,647	82	+11	582	1	1

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p	
		°	°						°	°				
10413	7 16,788	120	+24	12	2	2	7 25,647	311	-12	279	16	3		
							7 26,566	312	-10	282	24	3		
							7 27,651	310	-12	436	22	4		
10414	7 18,716	70	+ 3	12	1	1	7 28,644	310	-12	423	18	5		
							7 29,655	308	-12	393	24	6		
							7 30,669	309	-12	314	26	4		
10415	7 18,716	15	-13	630	1	1	7 31,643	310	-12	176	15	3		
	7 19,649	18	-14	727	1	1	8 1,644	310	-12	164	14	3		
	7 20,658	17	-14	679	1	1	8 2,649	309	-13	48	4	2		
	7 21,826	18	-15	642	10	3	8 3,672	304	-13	36	1	1		
	7 22,649	17	-14	727	10	2								
	7 23,569	16	-13	679	23	2	10424	7 25,647	350	-18	48	5	1	
	7 24,754	15	-15	630	12	2		7 26,566	350	-18	85	18	1	
	7 25,647	16	-14	618	19	3		7 27,651	351	-19	97	9	2	
	7 26,566	17	-13	569	36	3		7 28,644	350	-19	48	5	1	
	7 27,651	17	-15	606	8	2		7 29,655	348	-18	6	1	1	
	7 28,644	19	-13	558	1	1								
	7 29,655	19	-12	582	1	1								
	7 30,669	20	-12	582	1	1								
10416	7 19,649	58	+15	12	5	1	10425	7 26,566	8	+ 1	6	1	1	
10417	7 19,649	9	+ 4	170	1	1	10426	7 26,566	346	+ 8	12	10	1	
	7 20,658	8	+ 4	242	1	1		7 27,651	348	+ 7	12	3	1	
	7 21,826	9	+ 5	206	7	2	10427	7 27,651	287	-22	12	1	1	
	7 22,649	9	+ 5	242	6	2		7 28,644	288	-20	6	1	1	
	7 23,569	8	+ 7	218	13	2								
	7 24,754	8	+ 5	170	1	1	10428	7 27,651	281	+13	6	3	1	
	7 25,647	9	+ 5	97	6	1								
	7 26,566	10	+ 5	85	6	1	10429	7 28,644	27	+ 6	73	7	1	
	7 27,651	11	+ 5	48	8	1		7 29,655	27	+ 7	48	1	1	
10418	7 20,658	356	-13	145	1	1	10430	7 28,644	9	+ 4	48	2	1	
	7 21,826	359	-13	97	1	1		7 29,655	9	+ 4	12	5	1	
	7 22,649	359	-13	97	1	1	10431	7 28,644	270	+19	12	1	1	
	7 23,569	1	-13	73	8	1								
	7 24,754	359	-13	72	4	2	10432	7 28,644	250	+ 7	170	1	1	
	7 25,647	359	-13	48	1	1		7 29,655	248	+ 7	267	1	1	
	7 26,566	1	-13	12	1	1		7 30,669	250	+ 8	266	10	2	
	7 27,651	1	-13	12	1	1		7 31,643	249	+ 7	218	1	1	
	7 28,644	359	-14	12	4	1		8 1,644	250	+ 7	207	1	1	
	7 29,655	0	-14	12	1	1		8 2,649	250	+ 7	206	1	1	
	7 30,669	0	-14	24	4	1		8 3,672	249	+ 7	206	1	1	
10419	7 21,826	115	+20	12	4	1		8 4,644	249	+ 7	206	1	1	
10420	7 21,826	57	+13	12	1	1		8 5,761	248	+ 7	194	1	1	
	7 22,649	57	+11	170	17	2		8 6,569	249	+ 7	194	1	1	
	7 23,569	58	+13	109	13	2		8 7,683	249	+ 8	194	1	1	
	7 24,754	58	+11	48	5	1		8 8,650	250	+ 7	218	3	2	
	7 25,647	59	+10	24	1	1		8 9,647	250	+ 7	242	3	2	
	7 26,566	59	+11	30	10	2	10433	7 29,655	266	- 7	24	5	1	
	7 27,651	56	+10	12	1	1								
10421	7 22,649	32	+ 3	48	4	1	10434	7 29,655	232	-10	582	3	2	
	7 23,569	34	+ 3	12	5	1		7 30,669	233	-10	969	11	3	
	7 24,754	34	+ 3	24	3	1		7 31,643	235	-10	969	14	5	
10423	7 24,754	313	-12	97	1	1		8 1,644	238	-10	776	10	3	

TABLE III a

[illegible]

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p		
		°	°						°	°					
10450	8 15,663	12	+14	12	1	1	10456	8 25,742	255	-6	73	2	1		
	8 16,707	11	+14	121	6	2		8 26,646	253	-6	79	6	2		
	8 17,744	13	+15	279	19	3		8 27,590	254	-6	67	7	2		
	8 18,646	12	+15	376	14	3		8 28,644	254	-7	79	6	2		
	8 19,699	13	+15	364	13	3		8 29,644	257	-6	61	1	1		
	8 20,753	10	+14	400	12	3		8 30,692	256	-6	61	1	1		
	8 21,641	11	+14	436	26	3		8 31,583	256	-5	24	1	1		
	8 22,846	13	+13	400	5	3		9 1,647	256	-6	36	1	1		
	8 23,685	11	+14	218	6	2		10457	8 27,590	230	-16	24	6	1	
	8 24,766	13	+14	158	19	2			8 28,644	232	-17	12	3	1	
	8 25,742	12	+14	121	8	2			8 29,644	232	-17	6	1	1	
	8 26,646	19	+14	61	7	1		10458	8 28,644	272	+18	6	1	1	
	8 27,590	18	+14	48	1	1			10459	8 28,644	199	+13	48	4	1
10451	8 18,646	331	-19	194	1	1	8 29,644			198	+14	485	12	2	
	8 19,699	330	-19	194	1	1	8 30,692			198	+13	424	11	3	
	8 20,753	326	-19	206	2	2	8 31,583			199	+13	339	22	3	
	8 21,641	331	-19	194	1	1	9 1,647			198	+14	291	14	3	
	8 22,846	328	-19	218	5	2	9 2,725			199	+14	230	14	3	
	8 23,685	329	-18	254	7	2	9 3,654			206	+14	176	2	2	
	8 24,766	330	-19	194	2	1	9 4,684			202	+13	194	9	2	
	8 25,742	328	-20	291	6	2	9 5,652			206	+14	145	1	1	
	8 26,646	328	-21	206	4	2	9 6,658			206	+13	145	1	1	
	8 27,590	331	-20	145	4	1	9 7,663			207	+13	121	1	1	
	8 28,644	329	-21	109	6	2	9 8,656			207	+13	121	1	1	
	8 29,644	331	-21	97	1	1	9 9,621	207		+13	97	1	1		
	8 30,692	332	-21	97	1	1	10460	8 29,644	199	-15	18	2	2		
10452	8 18,646	324	+37	194	1	1		8 30,692	199	-25	42	2	2		
	8 19,699	321	+36	218	2	2		8 31,583	200	-23	24	1	1		
	8 20,753	319	+36	157	2	2		9 1,647	200	-23	48	4	1		
	8 21,641	320	+36	157	2	2		9 2,725	199	-23	16	1	1		
	8 22,846	320	+36	133	5	2		9 3,654	201	-22	12	1	1		
	8 23,685	318	+35	72	5	2	10461	8 30,692	268	+13	36	4	2		
	8 24,766	319	+36	48	1	1		8 31,583	270	+13	60	10	2		
	8 28,644	315	+37	12	4	1		9 1,647	270	+13	158	15	4		
	8 29,644	316	+37	6	1	1		9 2,725	269	+12	181	11	4		
								9 3,654	269	+12	218	8	2		
	10453	8 19,699	319	-12	121	1	1	10462	8 31,583	244	+7	6	2	1	
		8 20,753	319	-12	97	1	1		10463	8 31,583	234	+14	6	1	1
		8 21,641	320	-11	97	1	1		10464	9 3,654	250	+20	12	3	1
8 22,846		321	-11	73	1	1	10465	9 3,654	238	+14	12	2	1		
8 23,685		321	-11	48	2	1		10466	9 4,684	234	-19	60	4	2	
8 24,766		321	-11	48	1	1	9 5,652	234	-19	12	2	1			
8 25,742		319	-10	61	2	1	10467	9 3,654	181	+11	6	2	1		
8 26,646		321	-10	24	1	1									
8 27,590		323	-9	16	1	1									
8 28,644		323	-10	24	4	1									
8 29,644		321	-10	24	7	2									
8 30,692		323	-10	24	1	1									
10454	8 21,641	296	-3	24	3	1									
	8 22,846	298	-3	24	1	1									
	8 23,685	296	-3	48	4	2									
	8 24,766	297	-3	48	7	2									
10455	8 23,685	9	-15	85	5	2									
	8 24,766	8	-17	266	26	2									
	8 25,742	8	-16	339	4	2									
	8 26,646	13	-15	242	3	1									
	8 27,590	14	-13	267	1	1									

TABLE IIIa

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
10468	9 3,654	159	-16	12	1	1	10479	9 14,751	359	-13	24	2	2
	9 4,684	159	-16	12	1	1		9 16,638	3	-13	12	2	1
								9 18,643	3	-13	60	5	2
								9 19,636	4	-15	36	3	2
10470	9 6,658	81	-3	97	1	1		9 20,603	6	-14	22	3	2
	9 7,663	81	-4	193	3	3		9 21,601	6	-15	28	2	2
	9 8,656	82	-4	206	5	3		9 22,589	8	-13	40	6	3
	9 9,621	82	-4	108	24	3							
	9 10,645	83	-4	121	10	3	10480	9 15,641	77	+13	12	1	1
	9 11,658	85	-4	132	9	4		9 16,638	78	+12	48	10	1
	9 12,590	83	-4	181	32	4		9 17,655	76	+12	109	5	1
	9 13,614	86	-5	291	37	2		9 18,643	76	+12	97	1	1
	9 14,751	85	-5	194	11	2							
	9 15,641	83	-6	181	8	3							
	9 16,638	86	-5	169	9	2							
	9 17,655	87	-5	145	3	2							
10471	9 9,621	140	+16	28	6	2	10481	9 15,641	324	+17	242	1	1
10472	9 8,656	106	+12	18	2	2		9 16,638	325	+17	291	1	1
10473	9 9,621	54	+19	24	6	1		9 17,655	325	+17	291	1	1
10474	9 9,621	55	+22	12	1	1		9 18,643	326	+17	291	1	1
								9 19,636	323	+17	424	4	3
10475	9 11,658	136	+21	24	2	1		9 20,603	324	+17	387	5	2
	9 12,590	138	+22	60	12	2		9 21,601	325	+17	315	4	2
	9 13,614	139	+20	363	27	3		9 22,589	328	+18	291	1	1
	9 14,751	138	+19	460	2	2		9 23,651	327	+18	242	1	1
								9 24,612	328	+18	242	1	1
10476	9 11,658	15	-11	194	1	1		9 25,615	328	+18	255	1	1
	9 12,590	16	-11	194	1	1		9 26,665	327	+18	267	1	1
	9 13,614	16	-10	194	1	1		9 27,609	328	+18	267	1	1
	9 14,751	14	-10	163	4	3							
	9 15,641	15	-10	127	8	3							
	9 16,638	17	-10	143	10	3							
	9 17,655	17	-10	97	1	1							
	9 18,643	18	-13	266	9	2							
	9 19,636	17	-14	218	10	3							
	9 20,603	19	-12	146	7	2							
	9 21,601	16	-10	48	1	1							
	9 22,589	18	-12	36	1	1							
	9 23,651	17	-12	48	1	1							
10477	9 13,614	3	+14	134	12	2	10482	9 18,643	14	+12	48	4	1
	9 14,751	3	+14	388	6	2		9 19,636	15	+13	24	2	1
	9 15,641	3	+13	412	14	2							
	9 16,638	4	+14	363	14	3	10483	9 19,636	56	+1	12	4	1
	9 17,655	3	+13	291	9	2		9 20,603	57	+2	194	12	2
	9 18,643	3	+13	315	10	2							
	9 19,636	4	+12	291	10	2	10484	9 21,601	249	+15	121	3	1
	9 20,603	4	+13	241	15	3		9 22,589	246	+15	170	29	2
	9 21,601	4	+13	193	6	3		9 23,651	246	+15	121	18	2
	9 22,589	4	+14	181	7	2		9 24,612	248	+14	145	13	3
	9 23,651	5	+14	121	2	2		9 25,615	247	+15	145	13	2
10478	9 14,751	104	+13	12	3	1		9 26,665	247	+15	145	20	2
								9 27,609	247	+14	157	24	3
								9 28,606	249	+15	146	29	3
								9 29,672	247	+15	60	5	2
								9 30,706	255	+14	24	2	2
							10485	9 24,612	311	+16	48	11	1
								9 25,615	313	+16	84	12	2
								9 26,665	313	+16	97	7	2
								9 27,609	315	+15	54	14	3
								9 28,606	314	+15	24	6	1
							10488	9 27,609	196	-21	12	3	1
								9 28,606	194	-21	84	13	2
								9 29,672	193	-22	72	2	2
							10490	9 29,672	145	-7	170	2	2
								9 30,706	146	-7	206	6	3
								10 1,736	149	-7	97	4	3

TABLE IIIa

No.	Date	<i>L</i>	φ	<i>A</i>	<i>s</i>	<i>p</i>	No.	Date	<i>L</i>	φ	<i>A</i>	<i>s</i>	<i>p</i>
		°	°						°	°			
	10 2,636	151	-7	206	8	3		10 10,664	21	-14	73	2	1
	10 3,656	152	-7	327	25	3		10 11,695	20	-14	73	6	1
	10 4,737	150	-7	266	19	2		10 12,645	21	-13	48	4	1
	10 5,631	150	-7	194	8	2		10 13,759	21	-13	48	5	2
	10 6,646	152	-7	170	2	1		10 15,706	23	-14	97	13	1
	10 7,597	153	-7	109	2	1		10 16,645	24	-13	97	7	1
	10 8,601	154	-7	109	6	1		10 17,720	25	-13	61	4	1
	10 9,669	153	-7	97	1	1		10 18,651	27	-13	24	6	1
	10 10,664	154	-7	48	4	1							
10491	9 29,672	134	+22	291	1	1	10498	10 8,601	17	-11	388	7	1
	9 30,706	133	+22	242	1	1		10 9,669	17	-11	194	4	1
	10 1,736	134	+22	242	1	1		10 10,664	17	-13	290	7	2
	10 2,636	134	+22	218	1	1		10 11,695	16	-13	242	5	1
	10 3,656	134	+22	218	1	1		10 12,645	18	-13	230	11	2
	10 4,737	132	+22	218	1	1		10 13,759	15	-13	255	9	2
	10 5,631	132	+22	218	1	1		10 15,706	18	-13	145	6	1
	10 6,646	132	+22	218	1	1		10 16,645	19	-13	97	9	1
	10 7,597	133	+22	194	1	1		10 17,720	15	-12	133	14	2
	10 8,601	131	+22	194	1	1		10 18,651	18	-13	36	5	1
	10 9,669	131	+23	194	1	1							
	10 10,664	132	+22	194	1	1	10499	10 9,669	12	-10	48	2	1
	10 11,695	132	+22	194	1	1		10 10,664	12	-10	12	2	1
	10 12,645	134	+23	194	1	1		10 11,695	10	-10	12	9	1
10492	9 30,706	118	+12	48	1	1	10500	10 9,669	136	+20	48	12	2
	10 1,736	119	+12	97	1	1		10 10,664	136	+20	12	2	1
	10 2,636	120	+12	73	1	1							
	10 3,656	120	+12	73	1	1	10501	10 9,669	82	-15	12	1	1
	10 4,737	120	+12	48	1	1							
	10 5,631	121	+12	24	4	1	10502	10 11,695	110	+12	24	2	1
10493	10 4,737	80	+11	72	4	2		10 12,645	111	+12	6	2	1
	10 5,631	79	+12	121	7	2	10504	10 11,695	6	+20	24	2	1
	10 6,646	80	+12	85	8	2		10 12,645	7	+19	24	4	1
	10 7,597	81	+12	85	15	2		10 13,759	6	+18	48	2	1
	10 8,601	79	+12	73	19	2	10506	10 12,645	327	+17	109	1	1
	10 9,669	79	+12	64	5	2		10 13,759	327	+16	48	1	1
	10 10,664	76	+12	48	12	1		10 15,706	328	+17	67	2	2
	10 11,695	78	+8	36	6	2		10 16,645	330	+16	48	1	1
	10 12,645	78	+11	12	21	1		10 17,720	330	+15	48	6	2
10494	10 7,597	109	+15	36	8	1		10 18,651	331	+16	24	1	1
10495	10 7,597	90	+2	16	4	1	10507	10 13,759	9	-17	36	1	1
	10 8,601	89	+4	279	17	3		10 15,706	13	-17	267	28	1
	10 9,669	89	+5	254	4	3		10 16,645	11	-16	630	28	3
	10 10,664	89	+3	181	14	2		10 17,720	12	-18	655	11	2
	10 11,695	90	+2	145	1	1		10 18,651	14	-17	751	18	3
	10 12,645	92	+3	145	1	1		10 19,668	18	-17	533	6	2
	10 13,759	90	+3	145	1	1		10 20,651	18	-17	436	6	2
10496	10 8,601	25	-6	229	11	3	10508	10 13,759	358	+5	24	1	1
	10 9,669	25	-6	89	12	2		10 16,645	358	+5	12	1	1
	10 10,664	27	-5	16	4	1	10509	10 15,706	40	+2	60	7	2
	10 11,695	26	-5	6	2	1		10 16,645	43	+2	12	1	1
	10 15,706	28	-7	12	3	1							
10497	10 8,601	21	-14	291	1	1							
	10 9,669	21	-14	339	2	1							

TABLE III a

No.	Date	L	ϕ	A	s	p	No.	Date	L	ϕ	A	s	p	
		°	°						°	°				
10512	10 16,645	289	- 9	73	1	1	10 29,684	115	+12	412	5	3		
	10 17,720	289	- 8	169	14	3	10 30,659	114	+12	388	8	3		
	10 18,651	290	- 7	170	17	3	10 31,748	114	+14	291	12	4		
	10 19,668	290	- 7	170	17	3	11 1,659	117	+11	242	17	3		
	10 20,651	290	- 7	85	22	2	11 2,651	117	+11	217	13	4		
	10 21,653	292	- 7	72	15	3	11 3,638	117	+11	145	2	1		
	10 22,621	291	- 8	108	13	4	11 4,670	118	+13	109	7	2		
	10 23,713	294	- 7	207	28	3	11 5,676	119	+10	85	3	2		
	10 24,676	293	- 7	230	25	2	11 6,649	118	+12	36	3	1		
	10 25,705	294	- 7	339	11	2	11 7,647	118	+12	12	1	1		
	10 26,679	295	- 7	291	5	2	11 8,797	116	+13	12	3	1		
10513	10 16,645	286	+17	12	1	1	10524	10 29,684	219	+29	84	10	2	
	10 17,720	286	+17	12	3	1	10 30,659	218	+29	109	8	2		
							10 31,748	221	+29	36	1	1		
10515	10 20,651	242	+ 9	12	1	1	11 1,659	222	+29	24	3	1		
10516	10 21,653	282	+22	16	7	1	10525	10 29,684	204	+18	24	6	1	
10517	10 24,676	254	+16	12	1	1	10526	10 29,684	130	- 6	12	1	1	
							10 30,659	130	- 5	84	13	3		
							10 31,748	131	- 6	120	7	3		
							11 1,659	133	- 6	229	24	4		
10518	10 25,705	217	+29	61	8	1	11 2,651	133	- 6	266	25	3		
	10 27,651	221	+29	6	2	1	11 3,638	133	- 6	302	19	4		
							11 4,670	132	- 5	169	14	3		
10519	10 26,679	151	-13	170	6	2	11 5,676	134	- 5	169	5	2		
	10 27,651	152	-13	170	12	2	11 6,649	139	- 4	145	1	1		
	10 28,636	159	-12	188	8	4	11 7,647	140	- 4	145	1	1		
	10 29,684	154	-12	145	12	3	10527	11 4,670	33	+ 4	206	11	3	
	10 30,659	155	-12	254	11	3	11 5,676	36	+ 4	145	6	2		
	10 31,748	156	-12	169	8	3	11 6,649	36	+ 4	85	7	2		
	11 1,659	159	-11	145	1	1	11 7,647	35	+ 4	36	4	2		
	11 2,651	159	-11	145	1	1	11 8,797	35	+ 3	24	10	1		
	11 3,638	159	-11	145	1	1	10528	11 3,638	31	-12	24	1	1	
	11 4,670	156	-11	133	3	2	11 4,670	24	-13	485	6	3		
	11 5,676	159	-11	97	1	1	11 5,676	26	-14	387	3	3		
	11 6,649	160	-11	97	1	1	11 6,649	27	-13	279	7	3		
10520	10 26,679	146	- 4	145	1	1	11 7,647	27	-13	351	13	3		
	10 27,651	146	- 4	194	3	1	11 8,797	26	-14	351	34	3		
	10 28,636	146	- 4	121	1	1	11 9,649	27	-13	339	21	3		
	10 29,684	144	- 5	121	9	2	11 10,644	31	-15	218	1	1		
	10 30,659	144	- 4	73	1	1	11 11,633	29	-16	218	2	2		
	10 31,748	146	- 4	36	2	1	11 12,626	29	-15	194	1	1		
	11 1,659	147	- 5	24	8	1	11 13,637	29	-15	194	1	1		
	11 2,651	145	- 5	12	1	1	11 14,651	30	-15	194	1	1		
							11 15,651	29	-15	145	1	1		
10521	10 27,651	128	+22	97	1	1	10529	11 4,670	30	+12	48	4	1	
	10 28,636	127	+22	48	1	1	11 5,676	30	+12	12	3	1		
	10 29,684	126	+22	24	1	1								
	10 30,659	126	+22	12	3	1	10530	11 5,676	85	+12	266	7	3	
10522	10 28,636	238	+15	61	5	1	11 6,649	85	+12	582	10	3		
	10 29,684	238	+15	158	7	2	11 7,647	86	+12	654	17	3		
	10 30,659	239	+15	145	7	2	11 8,797	83	+13	667	31	3		
							11 9,649	85	+12	727	17	2		
10523	10 28,636	116	+12	388	4	1	11 10,644	86	+12	1018	7	2		

TABLE III a

No.	Date	<i>L</i>	φ	<i>A</i>	<i>s</i>	<i>p</i>	No.	Date	<i>L</i>	φ	<i>A</i>	<i>s</i>	<i>p</i>
		°	°						°	°			
	11 11.633	86	+12	800	11	2		11 26.634	147	+19	231	5	3
	11 12.626	82	+13	242	1	1		11 27.680	145	+19	121	4	2
								11 28.642	150	+19	73	1	1
								11 29.692	150	+19	61	1	1
10531	11 8.797	320	+15	145	2	1		11 30.740	149	+20	73	1	1
	11 9.649	322	+15	242	1	1		12 1.645	150	+19	24	1	1
	11 10.644	324	+14	218	1	1		12 2.656	150	+19	24	1	1
	11 11.633	323	+14	291	1	1							
	11 12.626	325	+14	242	1	1							
	11 13.637	326	+14	242	1	1							
	11 14.651	325	+13	387	8	2	10540	11 25.707	112	-17	24	8	1
	11 15.651	325	+14	339	2	2		11 26.634	114	-17	109	1	1
	11 16.739	326	+13	297	2	2		11 27.680	114	-17	267	12	1
	11 17.636	326	+14	315	2	2		11 28.642	117	-17	291	16	3
	11 18.617	327	+14	291	1	1		11 29.692	116	-17	399	12	3
	11 20.723	330	+14	267	3	1		11 30.740	116	-17	255	8	3
								12 1.645	118	-17	218	11	3
								12 2.656	116	-17	158	7	3
								12 3.760	118	-15	169	3	2
								12 4.746	119	-16	97	2	2
								12 5.717	118	-16	109	2	2
10532	11 10.644	317	+15	170	7	2							
	11 11.633	315	+16	217	17	4							
	11 12.626	314	+16	388	23	3							
	11 13.637	316	+16	460	9	3							
	11 14.651	317	+15	436	20	3	10541	11 26.634	123	-7	36	5	1
	11 15.651	315	+16	509	15	3		11 27.680	123	-6	218	11	2
	11 16.739	316	+17	606	26	3		11 28.642	123	-7	242	9	2
	11 17.636	316	+17	509	9	2		11 29.692	123	-7	206	9	2
	11 18.617	315	+15	436	8	2		11 30.740	123	-6	217	6	4
	11 20.723	319	+16	326	11	4		12 1.645	123	-6	146	10	3
	11 21.637	319	+15	194	3	2		12 2.656	120	-7	84	5	2
								12 3.760	121	-7	24	5	1
10533	11 11.633	302	-7	121	2	1							
	11 12.626	302	-7	61	1	1							
	11 13.637	302	-7	61	1	1	10542	11 27.680	83	+12	291	1	1
	11 14.651	302	-7	36	1	1		11 28.642	83	+12	315	1	1
	11 15.651	302	-8	24	3	1		11 29.692	83	+12	315	1	1
	11 16.739	301	-8	24	2	1		11 30.740	84	+12	339	1	1
								12 1.645	85	+12	388	1	1
								12 2.656	84	+12	339	2	1
10534	11 11.633	42	-13	12	3	1		12 3.760	85	+13	339	5	2
								12 4.746	84	+12	242	6	2
								12 5.717	86	+13	194	6	2
								12 6.629	84	+12	182	4	2
10535	11 12.626	302	-11	16	3	1		12 7.738	85	+11	254	3	3
	11 15.651	302	-12	12	4	1		12 8.799	83	+12	194	1	1
10536	11 15.651	337	+17	12	1	1							
	11 17.636	335	+19	48	1	1	10543	11 27.680	99	-23	121	5	2
	11 18.617	336	+19	36	1	1		11 28.642	99	-23	157	11	2
								11 29.692	101	-23	290	9	3
								11 30.740	101	-23	218	5	2
								12 1.645	101	-23	182	10	3
								12 2.656	99	-23	133	7	3
10537	11 15.651	289	+17	18	3	2		12 3.760	100	-23	48	5	2
	11 16.739	285	+17	121	18	1		12 4.746	105	-22	16	1	1
	11 17.636	287	+16	96	11	2		12 5.717	104	-22	16	1	1
	11 18.617	288	+17	120	11	3							
	11 20.723	289	+17	60	30	2							
	11 21.637	287	+17	36	9	1							
	11 22.782	288	+18	36	3	2	10544	11 30.740	135	-7	36	2	1
	11 23.675	290	+18	24	1	1		12 1.645	133	-7	206	7	4
								12 2.656	133	-7	424	13	3
								12 3.760	135	-7	557	22	5
								12 4.746	136	-7	411	11	4
								12 5.717	135	-6	169	6	2
10539	11 22.782	148	+18	145	1	1							
	11 23.675	147	+18	194	5	2							
	11 24.667	147	+19	157	3	2							
	11 25.707	146	+20	109	8	2	10545	12 1.645	27	-15	145	1	1

TABLE III a

No.	Date	L	φ	A	s	p	No.	Date	L	φ	A	s	p
		°	°						°	°			
	12 2,656	27	-15	121	1	1	10551	12 7,738	308	+16	642	6	3
	12 3,760	28	-15	97	1	1	12 8,799	307	+15	581	7	2	
	12 4,746	30	-15	85	1	1	12 9,636	309	+15	630	20	4	
	12 5,717	29	-15	73	1	1	12 10,639	309	+15	424	61	4	
	12 6,629	27	-15	61	1	1	12 11,642	310	+16	339	30	4	
	12 7,738	24	-14	97	10	3	12 12,636	313	+15	339	14	3	
	12 8,799	25	-14	109	4	2	12 13,642	312	+17	266	25	3	
	12 9,636	26	-13	120	4	3	12 14,666	311	+16	315	8	2	
	12 10,639	29	-16	12	3	1	12 15,978	308	+16	97	10	3	
							12 16,655	310	+17	67	2	2	
10546	12 4,746	91	- 6	24	3	1	12 17,650	310	+17	48	1	1	
							12 18,926	308	+17	48	1	1	
							12 19,656	308	+17	24	1	1	
10547	12 3,760	359	-12	291	1	1	10552	12 9,636	32	+11	73	2	1
	12 4,746	358	-13	303	9	2	12 10,639	34	+12	134	10	2	
	12 5,717	357	-13	290	6	2	12 11,642	34	+12	194	7	2	
	12 6,629	359	-12	266	3	2	12 12,636	31	+13	145	5	2	
	12 7,738	357	-12	282	3	3							
	12 8,799	1	-11	254	9	3	10553	12 11,642	285	+14	6	2	1
	12 9,636	1	-11	242	1	1							
	12 10,639	2	-13	206	1	1	10555	12 15,978	285	-23	6	3	1
	12 11,642	2	-13	242	1	1	12 16,655	292	-22	28	3	2	
	12 12,636	2	-13	218	1	1	12 17,650	293	-22	12	1	1	
	12 13,642	3	-13	206	1	1							
	12 14,666	3	-13	194	1	1							
10548	12 5,717	351	-14	48	7	1	10556	12 20,652	149	- 6	12	1	1
	12 6,629	352	-14	266	10	3							
	12 7,738	351	-16	194	26	2	10557	12 20,652	289	+13	24	1	1
	12 8,799	352	-14	193	6	2							
	12 9,636	355	-15	108	16	3	10558	12 23,663	122	+11	16	5	1
	12 10,639	357	-16	42	8	3	12 24,663	124	+11	96	11	3	
10549	12 6,629	315	+13	194	1	1	12 25,649	123	+11	231	32	3	
	12 7,738	316	+15	267	2	2	12 26,643	123	+11	508	8	3	
	12 8,799	317	+13	255	2	2	12 27,629	123	+11	631	16	4	
	12 9,636	318	+14	424	16	4	12 28,703	125	+12	436	23	2	
	12 10,639	318	+13	279	34	3	12 29,720	125	+11	315	15	3	
	12 11,642	318	+14	484	42	4	12 30,708	126	+11	303	9	3	
	12 12,636	321	+14	327	18	4	12 31,631	125	+11	146	2	2	
	12 13,642	322	+14	267	22	3	1 1,647	128	+12	73	1	1	
	12 14,666	324	+15	97	2	1							
	12 15,978	325	+15	61	1	1	10559	12 24,663	110	- 9	30	5	2
	12 16,655	327	+15	24	1	1	12 25,649	112	- 8	28	3	2	
	12 17,650	327	+15	12	1	1	12 26,643	114	- 8	97	2	2	
							12 27,629	116	- 6	61	5	1	
10550	12 7,738	358	+21	109	5	2	10560	12 24,663	106	- 8	12	1	1
	12 8,799	357	+21	461	9	3	12 25,649	106	-10	18	9	2	
	12 9,636	357	+21	411	16	3							
	12 10,639	357	+19	460	32	3	10561	12 27,629	141	- 7	6	2	1
	12 11,642	0	+20	460	10	3							
	12 12,636	356	+20	521	11	4							
	12 13,642	359	+20	484	11	4							
	12 14,666	356	+21	484	8	3							

TABLE III b

Date	L	φ	A	s	p	Date	L	φ	A	s	p
	°	°					°	°			
1 8,681	96	+12	24	4	1	6 26,650	24	+15	6	6	1
1 10,644	28	- 2	12	4	1	7 1,699	348	-17	12	5	1
1 17,785	299	+15	12	1	1	7 4,690	258	+12	12	3	1
1 19,887	265	+13	24	5	1	7 11,650	188	+16	16	4	1
1 26,658	209	+19	12	3	1	7 15,564	77	+13	12	5	1
1 28,700	241	+13	73	4	1	8 24,766	263	- 4	12	1	1
1 29,792	240	+13	24	1	1	8 30,692	252	+ 7	12	2	1
1 30,667	249	+ 8	36	5	2	9 4,684	194	+16	16	7	1
2 1,743	148	+20	6	1	1	9 5,652	106	+13	12	1	1
2 2,744	144	-15	6	1	1	9 28,606	304	- 5	12	3	1
2 2,744	152	+20	12	4	1	10 8,601	64	+ 2	12	3	1
3 1,632	156	+23	30	5	2	10 9,669	78	- 5	6	1	1
3 4,656	46	+ 3	12	2	1	10 12,645	352	+18	12	2	1
4 3,701	44	+10	12	3	1	11 8,797	37	-16	12	5	1
4 11,778	306	+16	12	1	1	11 9,649	49	+ 2	12	1	1
4 15,865	202	+18	12	1	1	11 14,651	334	+17	36	2	1
5 11,637	271	- 5	6	1	1	11 20,723	235	+15	24	3	1
5 14,686	288	+ 5	12	1	1	12 3,760	121	+ 3	12	2	1
6 5,684	282	-35	18	3	2	12 21,648	140	- 6	12	5	1
6 8,681	329	+ 9	6	1	1	12 22,653	153	+ 7	6	3	1
6 11,769	222	+ 6	84	13	3						

TABLE IV

Group	Recurrence of			Group	Recurrence of		
10206	10175			10380	10351		
10211	10177			10382	10350		
10217	10185			10395	10378		
10223	10194			10400	10373		
10230	10200			10409	10382	10350	
10231	10214			10411	10384		
10233	10208			10415	10398		
10256	10236			10432	10405		
10262	10229			10446	10411	10384	
10267	10230	10200		10447	10415	10398	
10268	10231	10214		10476	10447	10415	10398
10272	10235			10491	10475		
10279	10241			10498	10476	10447	10415 10398
10287	10252			10506	10481		
10288	10250			10510	10496		
10292	10265			10511	10508		
10298	10262			10521	10491	10475	
10318	10288	10250		10528	10497		
10321	10294			10533	10512		
10323	10292	10265		10545	10528	10497	
10332	10305			10549	10531		
10344	10312			10551	10532		
10347	10314			10556	10544		
10365	10332	10305					